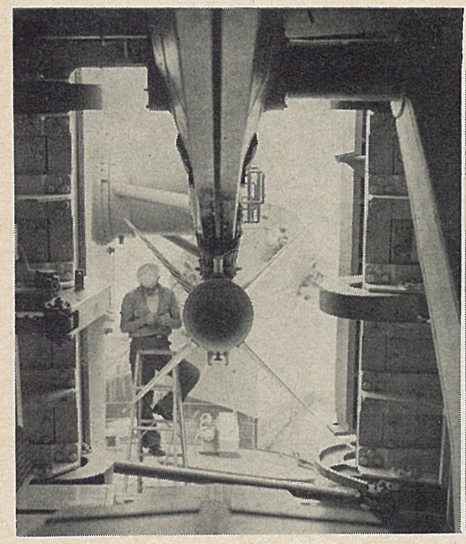
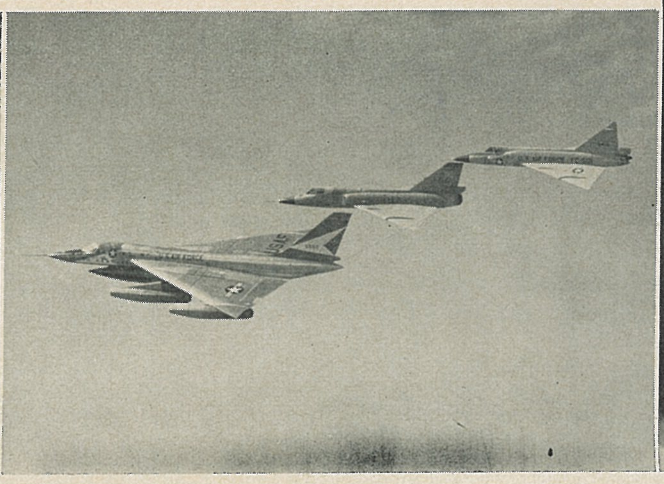
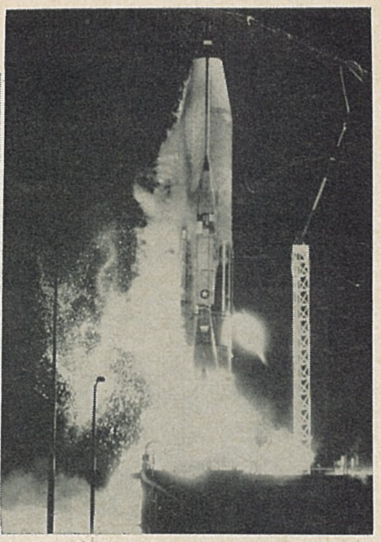
These Topped Convair News in '58









NEWS MAKERS—These six products made many a headline during 1958 and doubtless will continue to do so in 1959. Biggest and blackest were earned by Atlas missile, far right, but others had their share. From left, Terrier missile aboard USS Gyatt; jet 880 at roll-out; B-58, F-106 and F-102 in aerial rendezvous.

C-V CONVAIR

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GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

San Diego EDITION

(Serving San Diego Division of Convair)

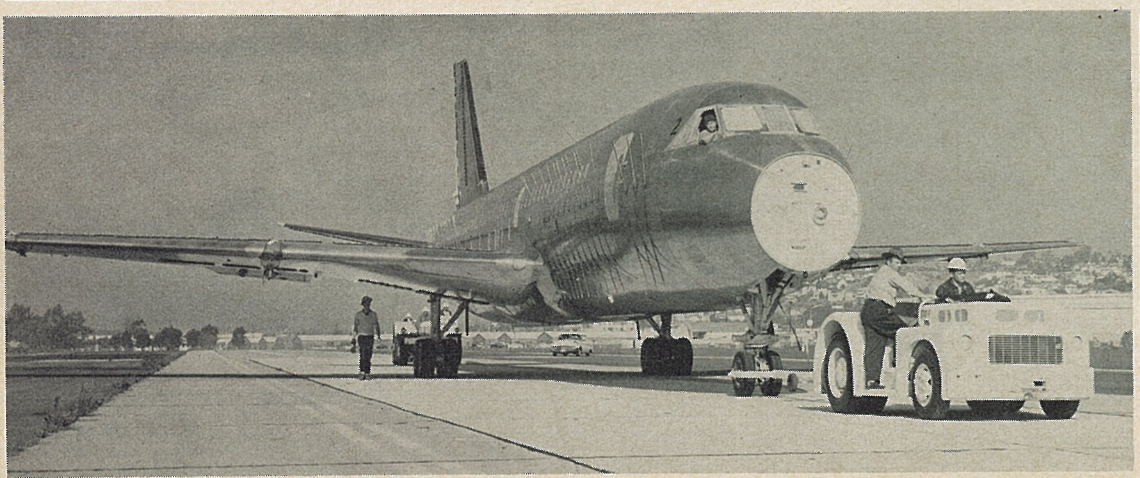
SD Division news office: Plant 1, Bldg. 32, ext. 1071.

Vol. 12, No. 1

Wednesday, January 7, 1959

SAN DIEGO, POMONA AND ANTELOPE VALLEY, CALIFORNIA

DAINGERFIELD AND FORT WORTH, TEXAS



DOWN THE RUNWAY—Second Convair 880 jet transport was the first 880 to move onto Lindbergh Field runways as it was towed from San Diego Plant 1 to the seaplane ramp to go into structural testing. It moved out of final assembly the day before Christmas.

Rise Expected In Employment For SD Area

Predictions for Convair in 1959 were generally optimistic and challenging as reflected last week in statements issued by General Dynamics Corporation and Convair Division executives.

Pace

Frank Pace Jr., president of General Dynamics: "New basic concepts of the transportability of men and materials are undergoing radical inquiry at Convair Division, the results of which will certainly shrink the dimensions of the world as we know it and will probably allow men for the first time to leave this earth for protracted periods . . ."

Naish

J. V. Naish, president of Convair: "Average employment totals for the General Offices, San Diego and Astronautics Divisions will be 41,700 during 1959, compared with 35,400 during 1958 . . . San Diego Division will average 26,000 employees with about 1,850 stationed at various test and operational bases away from San Diego. This year's (1958) average for the division was 24,400 with 3,050 employed off-site . . . Astronautics Division employment will increase from an average of

(Continued on Page 2)

ROY ASHE NAMED BUDGET DIRECTOR

Roy F. Ashe last week was appointed director of budgets and estimating in Convair's General Offices, reporting to R. R. Brewton, controller.



Roy F. Ashe

Ashe, who has been with Convair for nearly 20 years, was succeeded as 880 administrator by Arthur J. Braidic.

It is Braidic's second time in the position. He was 880 administrator up until he left the company in May, 1957, at which time Ashe took over. Braidic returned to Convair in long range planning in March, 1958.

Ashe is a native of Luther, Minn., and holds a law degree from Balboa University. He joined Convair in 1939 in experimental and held a number of production posts before transferring to estimating in 1951. He was president of the SD Management Club in 1952.

ASTRO FOLK GIVE $7,000 TO NEEDY

While some reports continue to trickle in, it appears that Convair Astronautics employees contributed well over $7,000 to assist the needy during the recent holiday season.

Aided were more than 80 families, each composed of an average of five to six members.

So many different departments and functions took part that it is impossible to name them all. Some took needy families and provided for them. Others donated money. Typical of this trend were engineering functions who collected $1,015 alone. This was in lieu of exchanging Christmas cards.

A special bank account was set

(Continued on Page 2)

Jet 880 Taxi Tests Begin Over Lindbergh Field

Taxi tests for the first Convair 880 jet transport are scheduled for this week at Lindbergh Field.

Crews have been working day and night throughout the holidays and weekends (except for Christmas Day) to push tests on plane No. 1 in field operations and plane No. 2 in structures test laboratory to meet deadlines before the first plane takes to the air the last of January.

"To date, all field operations tests have proved satisfactory," said F. G. Brown, field operations foreman, "with no problems developing to hold up our tight schedule."

Following first slow taxi, the huge craft will go to the seaplane ramp for 11 days of vibration tests and then back to field operations location for preparation for its shake-down flight, said F. F. Stevens, general foreman.

The second Convair 880 is now well into a structural test program at the ramp after leaving final assembly Dec. 24.

Control systems are being checked out now before the first plane goes into flight tests. Primary control group of dynamics laboratories under J. W. Mansfield, assistant test group engineer, is in charge of flight control systems ground tests.

It will then go into an extensive structural test program to last until late summer under supervision of E. F. Strong, chief of structures and material laboratories.

A. R. Vollmecke and his crew are load testing all control surfaces with the plane simulating actual flight while tied down in one spot.

Straps run from the more than 350 tension pads glued to the plane's wing and tail to hydraulic cylinders bolted to ceiling and floor of the hangar. Around 80 aluminum straps riveted to the fuselage also are attached to the cylinders which put the plane under load by flexing wings and fuselage.

Pro Golf Ticket Discount Offered

Golf enthusiasts at Convair SD will be able to watch the pros perform in the San Diego PGA Open Golf at cut-rate prices. Now on sale at employee services, Plants 1 and 2, are tickets priced at $3, good for a weekend of professional golf, Jan. 31 and Feb. 1.

Tickets for the Tijuana Open, Jan. 9-12, are also available at the employee services locations. They are priced at $1, good for one day only.

Esenwein Appointed Convair Executive VP

August C. Esenwein, Fort Worth Division manager since December, 1950, has been named executive vice president of Convair, J. V. Naish, Convair president, announced this week.



August C. Esenwein, left, shown with Frank Pace Jr., president of General Dynamics Corporation.

He is being succeeded at Fort Worth by Frank W. Davis, chief engineer, who becomes a Convair vice president and general manager of the division.

Naish said that Esenwein's primary responsibilities will be control of internal operations of all of Convair's five divisions. T. G. Lanphier Jr., Convair vice president, will be Convair's primary representative in external affairs with responsibilities over military sales, public relations and advertising.



Frank Davis

At the same time, Naish announced appointment of J. G. Zevely, director of contracts and commercial sales, as vice president—contracts and commercial

(Continued on Page 2)

Orbiting Atlas Major Convair Triumph in '58

Convair's Atlas ICBM which literally lifted itself into space by its own "boot straps" last month has captured the fancy of the whole world.

Few events in recent history have been so discussed.

The big "space bird," a product of Convair Astronautics, blasted off its Florida launching pad just after dark Dec. 18. Onlookers saw it paint a flaming trail into the heavens. Instead of roaring toward a South Atlantic impact point, as others before it have, the Atlas climbed into space. It began an egg-shaped orbit, 914 miles from the earth at apogee and only 118 miles at perigree. It weighed over four tons and was said to be traveling at speeds of about 17,000 miles per hour, making a circle of the earth approximately once every 100 minutes.

The Pentagon had a name for the operation—Project Score, after the first letters of the words signal, communications, orbit, relay equipment.

But to the man on the street it has been simply "the Atlas."

There are many interesting facts about the project. Many have been told and re-told through news media. Others remain the exclusive property of the military and scientist. To Convair men and women, particularly those who build the Atlas, two key points stand out. Foremost is the extreme secrecy which marked the planning and execution of the "shot." The other is the unique communications system aboard.

While thousands helped build, test and launch the Atlas into orbit, less than 100 persons were reported to have known in advance of its intended use as a satellite. Sixteen of these were Astro men.

"Naturally, this meant restricting the information to only those who 'had to know,'" J. R. Dempsey, Astro Division manager, explained. "Scores of our top people were not informed. This was not

(Continued on Page 8)



KERPLUNK!—Astro girls toss money for charity at last minute before Bldg. 2 reflecting pool was drained. Nearly $1,000 was found beneath surface.

ASTRO FOLK GIVE $7,000 TO NEEDY

(Continued from Page 1)
up to handle all money. While employee services administered the fund, all expenditures were investigated and approved in advance by representatives of the Employees' Con-Trib-Club committee.

Of general interest to all were the coins tossed in the Bldg. 2 reflecting pool. When drained Dec. 23 it yielded $995.31. (For the record, there was also one key, three pesos, a Canadian nickel, an English half-crown and a slug from a Nevada gambling house.)

The Christmas fund from the pool was used to buy gifts and other items for 14 families consisting of some 60 members. Each family received a check of from $50 to $100, dependent upon need.

In addition, 13 teen-agers and 42 youngsters under 5 years received gifts and clothing. They were the brothers and sisters of 117 youngsters who attended a Con-Trib-Club—Salvation Army sponsored party at the plant Dec. 20. The party was for those between the ages of five and 12 only.

KSDO Will Broadcast Coggan Address to SD Management Club

Radio station KSDO will broadcast a talk by B. F. Coggan, San Diego Division manager and Convair vice president, entitled "Management Copes with Speed, Spirit and Space," Jan. 14 at 8 p.m.

Coggan will be the principal speaker at a meeting of the Convair San Diego Management Club in the Palm Room of the U. S. Grant Hotel.

Theme of the meeting, sponsored by the industrial engineering department, will be "Management Prepares for the Space Age."

In his presentation, Coggan is expected to discuss qualities of a good manager, human factors in the coming space age, and utilization of space exploration for peaceful purposes.

Also on tap for the meeting (but not to be broadcast) will be presentation of the Mug of the Year award and MacSave-it awards for November and December.

After dinner entertainment will be provided by the Convair SD Choralaires under the direction of W. A. Vogel (Dept. 8).

New Style of Paycheck to Appear Friday For San Diego Division

A new type of payroll check will be in the hands of all hourly and flat-salaried employees at Convair San Diego this Friday (Jan. 9).

(Only SD Division is affected. Astronautics checks remain the same.)

The familiar tab card checks have been discarded in favor of paper checks to permit use of the electro data processing method to speed payroll operations, said J. L. Terrien, payroll supervisor.

The new check itself is 5 inches in length with a 7-in. stub containing a great deal more salary and deduction information than the former checks.

All payments to the employee will be included in the new checks with the single exception of Employee Suggestion awards, which will be paid separately as in the past, said Terrien. Vacation and sick leave time will hereafter be included in the regular checks of hourly employees, at the time department clerks submit the necessary information to the payroll department.

Total hours worked have been broken down into regular, overtime, and double-time paid. Adjustments due the employee will be listed on the stub as well as bond deductions and balance in bond accounts. Bond refunds will be included in the checks at cancellation.

College Counselor Service Available

Counselors from San Diego State College will be available by appointment at Convair San Diego the latter part of January.

Plant 1 employees may obtain counseling Jan. 28 in the training office. Appointments should be requested by calling M. M. Saunders, ext. 491, Plant 1. The same service for Plant 2 employees will be available Jan. 29. Appointments can be made by calling L. E. Woll, ext. 211, Plant 2.

New students filing for admission to the college must do so by Jan. 9. Graduates and those seeking readmission should file before Jan. 30 or on Feb. 7.

Is It News?
Call Convairiety

★ Convairiety ★

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Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 69C, mezz., ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; Bobbie Sue Marr, Horace A. Baker Jr.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Advancing Employment Slated For Convair in San Diego Area

(Continued from Page 1)
10,700 (during 1958) to 15,435 during 1959. The (Astro) average employment at operational and test bases will increase from 2,000 to 2,700 . . ."

Coggan

B. F. Coggan, SD Division manager: "Acceleration of the 880 and F-106 programs will create increased and steady employment for SD Division in 1959. Research and development programs also will be accelerated to keep Convair in the forefront of the aviation industry . . . The first 880 was rolled out of the factory Dec. 15, 1958. Six more of the big airliners will be factory-completed during 1959 and at least five and possibly six will be flying before the end of the year . . ."

Dempsey

J. R. Dempsey, Astronautics Division manager: "Astronautics will grow in 1959. Development tests will continue in Florida, but program emphasis will shift from testing to supporting the missile at Strategic Air Command bases. Integrated weapon system training will be under way at Vandenberg AFB, and a build-up of Convair personnel at Warren AFB, Cheyenne, Wyo., has begun. The build-up at Warren will continue most of the year, reaching a peak of about 500 . . . In the second half of the year we will begin on-site work at Omaha toward the activation of Atlas facilities at Offutt AFB. Also, by that time, we will be making plans for the move into Fairchild AFB at Spokane . . ."

Naish

Naish had this to say further concerning expectations for 1959: "Convair will spend about $300 million for materials, subcontracts, services and wages in the San Diego area during the year . . . Monthly payrolls for the two divisions based at San Diego will average nearly $20 million. The average for Astronautics will be about $6 million a month and $14 million for San Diego Division.

"In addition, Convair will spend nearly $53 million in the San Diego area with vendors and subcontractors. SD Division expenditures will be about $42 million, an increase of $10 million from 1958, and the Astronautics Division's will total nearly $11 million, an increase of about $1 million.

Coggan

Coggan continued: "While major emphasis during 1959 will be on production of the 880 and the F-106 at San Diego Division, we are continuing studies and developments of still newer, more advanced air and space vehicles and of newer, faster, better, and more economical methods of production.

"Advanced engineering studies are progressing in the field of anti-missile missiles. Studies also are continuing on atomic-powered aircraft. A recent contract calls for studies on a hydro ski landing system for large flying boats.

"Flight testing of an experimental ballistics supply missile, the Lobber, is far advanced.

"A recent Air Force multi-million dollar contract for a data handling system projects the division into computer system design and manufacture . . . Current research programs that will continue in 1959 include formability of new alloys of titanium, application of numerical control machines to fields other than machining, high velocity forming of metals, use of dynamic etching to produce parts from new alloys . . ."

Dempsey

Dempsey had this to say further: "Astronautics at San Diego will be concerned with continuing production of the Atlas and with classified space projects. We are activating the product support center at Plants 1 and 2 of the San Diego Division. The center will furnish mobile maintenance teams to work with SAC officers at Atlas bases and training facilities.

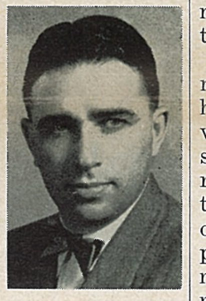
"This has been a rewarding year for us at Astronautics. There is much work to be done in 1959, but I am confident that the people in our organization who successfully put the Atlas in orbit in 1958 will meet whatever new challenges are presented in 1959 with equal success."

Esenwein Appointed New Executive VP

(Continued from Page 1)
sales, and of E. P. Wohl, director of planning, as vice president-planning.



J. G. Zevely



E. P. Wohl

All new appointments are effective Jan. 15.

Davis will be succeeded as chief engineer at Fort Worth by Robert H. Widmer, formerly assistant engineer for technical design.

Esenwein joined Convair in August, 1950, spent a brief time at San Diego and in September became assistant division manager at Fort Worth. He succeeded Ray O. Ryan in December of that year. He was made a Convair vice president in June, 1953. A graduate of Yale, Esenwein served 1942-1946 in the Air Materiel Command as a lieutenant colonel and from 1946 to 1949 as executive vice president of Aviation Maintenance Corp. of Van Nuys, Calif. He was general manager of Piper Aircraft before joining Convair.

Davis joined Convair at Vultee Field in 1940 as a test pilot. He came to San Diego in 1947 as chief design engineer and was closely identified with development of the XF-92A delta wing which paved the way for the F-102 and F-106. He was assistant to the vice president-engineering when transferred to Fort Worth in 1952.

Zevely joined Convair in July, 1949. Previously he had been in private law practice, had served as counsel for RFC and had been an assistant vice president of American Airlines. His first position with Convair was as manager of contracts for the SD Division.

A World War II Navy officer, Wohl came to Convair in July, 1952 from the staff of the Secretary of Defense. His first position was as assistant to the president and in September of 1957 was named director of planning for Convair.

Club to Offer Scholarships

The twelfth annual Convair SD Management Club scholarship program for Convair sons and daughters gets under way this month.

Two $1000 scholarships will be given, one each to the winning boy and girl. They will be divided into four separate payments, $250 for each college year.

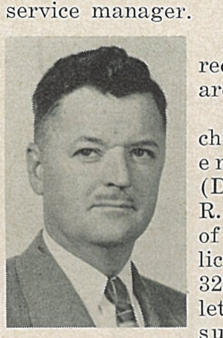
This year, in addition to the top awards, the two boy and two girl runners-up each will receive a $100 U. S. Savings Bond, said Tracy Brooks, chairman of the scholarship committee.

Application forms will be out to all city, county, and parochial high schools by the middle of January. They also may be obtained from Brooks, ext. 560, Plant 1.

Clare to Head New Support Dept. at Astro

Creation of a new support service department within the Astronautics product support department has been announced by E. A. Reynolds, manager of product support.

Heading the new department (320) is E. T. Clare as support service manager.



E. T. Clare

Reporting directly to Clare are: R. F. Nelson, chief of support engineering (Dept. 321); G. R. Spitzer, chief of support publications (Dept. 322); W. V. Gillette, chief of support logistics (Dept. 325); and H. C. Courington, chief of support documentation (Dept. 327). The last three are new appointments which became effective Monday (Jan. 5) along with Clare's promotion.

In making the appointments, Reynolds indicated the new department would enable a streamlining of specific functions to provide better service to the customer, as well as to internal groups.

Clare joins product support from engineering where he has served as a senior project engineer since June, 1957. He first joined Convair SD in May, 1952 as a design specialist, working up to the post of assistant chief electronics engineer before transferring to Astro. He is a native of Brooklyn and holds a bachelor of electrical engineering from Polytechnic Institute of Brooklyn and an M.S. degree in engineering from the University of California.

Spitzer hails from Columbus, Ohio. He joined Convair at Fort Worth in 1949 as a service engineer. He held several different service engineering supervisory posts there and moved to Astronautics in 1957 as a service publications supervisor. He has been support publications general supervisor.

Gillette is a native Californian who has had wide experience in aircraft and airline operations. He joined Convair FW in 1949 as a contract liaison man and worked in various contract, material and spares posts until moving to Convair Astro in 1957. He has served as chief of supply depot center.

Courington comes from Jacksonville, Ala. He worked for various business and military firms before joining Convair SD in 1950 in a tooling job. He moved to industrial engineering one year later and to Astro in June of 1958. He has served as data control supervisor.

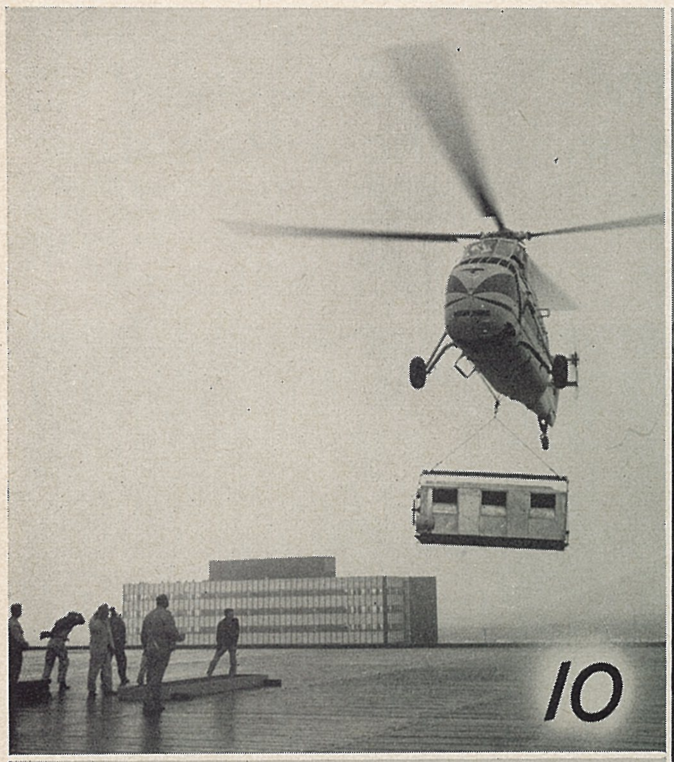
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As a result of the transfer of E. T. Clare to product support department, two new appointments have been announced in engineering by Mortimer Rosenbaum, chief engineer.

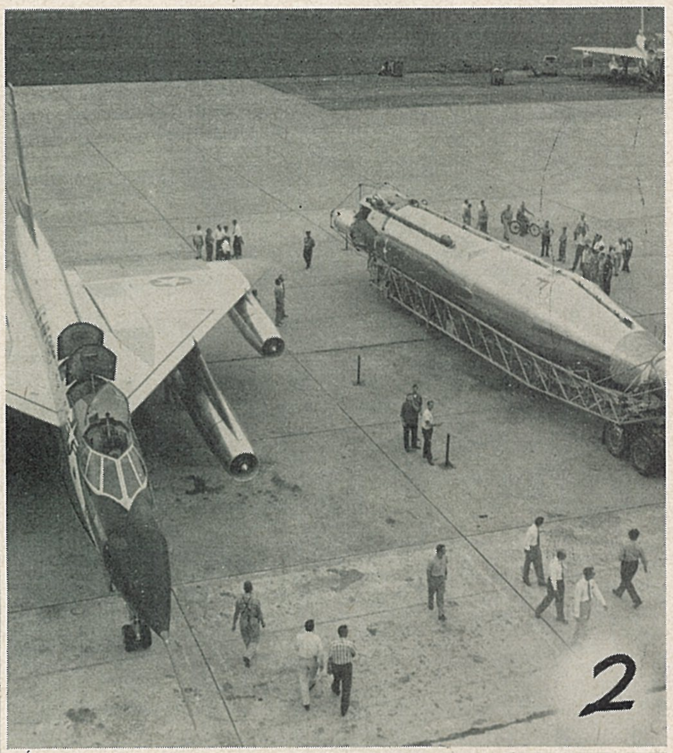
S. L. Ackerman becomes a senior project engineer replacing Clare in charge of airborne systems and Azusa office. D. F. Folland assumes Ackerman's former title of senior electronics group engineer in charge of trajectory measurement and radiation control.

Ackerman is a native of New York City with an extensive background with civilian and military firms dealing in electronics matters. He came to Convair Astronautics in 1956 after holding several important service and civilian positions at the Air Force Missile Test Center.

Folland hails from Salt Lake City and holds a B.A. in physics from the University of Utah and an M.S. in electrical engineering from Cal Tech. He has been with Convair since 1952 and has devoted most of his time to the Atlas project.













NEWS HIGHLIGHTS OF 1958

No. 1—Top personnel news of year was succession of J. V. Naish, right, to presidency of Convair, succeeding Gen. Joseph T. McNarney.

No. 2—Atlas missile was publicly displayed for first time during 1958. It is shown here alongside B-58 during stop at Fort Worth plant.

No. 3—Pomona Division was honored during 1958 for outstanding service to Navy. Shown during ceremony, left to right: J. V. Naish, Convair president; Rear Adm. T. A. Ahroon, assistant chief, Bureau of Ordnance; Charles F. Horne, Pomona Division manager; Capt. Robert B. Heilig, USN, NIO at Pomona.

No. 4—Armed Forces Day found Convair airplanes on display at many points. Shown at Washington with F-106, from left: B. F. Coggan, SD Division manager; R. L. Johnson, chief engineering test pilot; Lt. Gen. W. H. Tunner, USAF; August C. Esenwein, FW Division manager; T. G. Lanphier Jr., Convair vice president.

No. 5—First F-106B, two-place version, made its first flight in April, 1958.

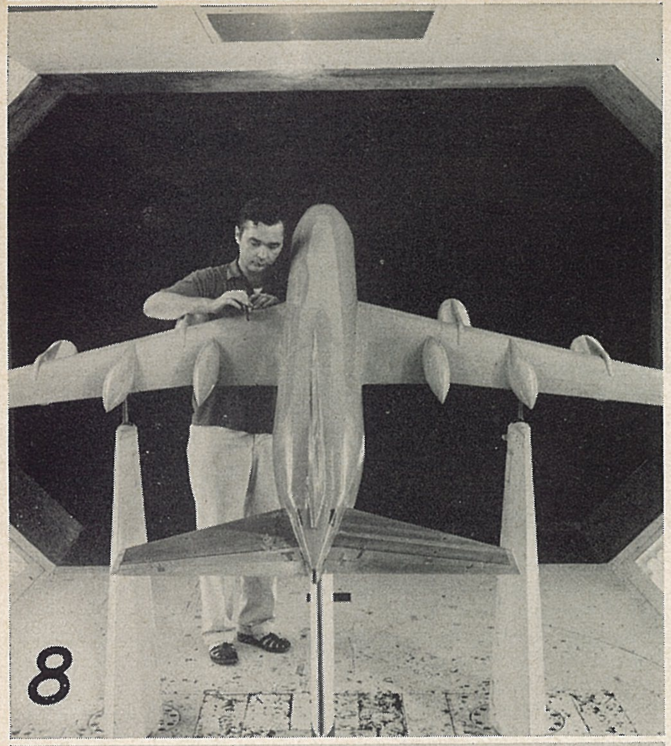
No. 6—Modification of F-102s made great strides at Palmdale facility during year as steady stream of aircraft returned for updating.

No. 7—First peek inside jet 880 was permitted during 1958 when Convair released photos taken in mockup, using professional models as "passengers."

No. 8—Convair jet 600 was first announced during year. Transport, which will fly for American Airlines, has revolutionary aerodynamic design. George Perkins, SD Dept. 6, is shown with wind tunnel model.

No. 9—Astronautics Division's handsome new plant at San Diego was dedicated in July, 1958. Affixing plaque is Frank Pace Jr., president of General Dynamics Corporation. Others, from left: Gen. Joseph T. McNarney, past president of Convair; J. V. Naish, current president of Convair; J. R. Dempsey, Astro Division manager; and Dr. Hugh L. Dryden, director, National Advisory Committee for Aeronautics.

No. 10—Construction of Astro plant produced some novel scenes, such as this helicopter positioning part of heating-ventilating equipment atop building.











MEMORIES—Typical of large number of retired servicemen in ranks of Astro security guards are B. A. Polen, left, and W. F. Maguire, security captain. They are shown looking over mementoes of cruise they made together aboard USS Valley Forge in 1947-48.

Military Past Marks Majority Of Guard Force at Astronautics

Ever hear of a security guard force with 58 chiefs?

Astronautics has one. And all the "chiefs" work in the immediate San Diego area.

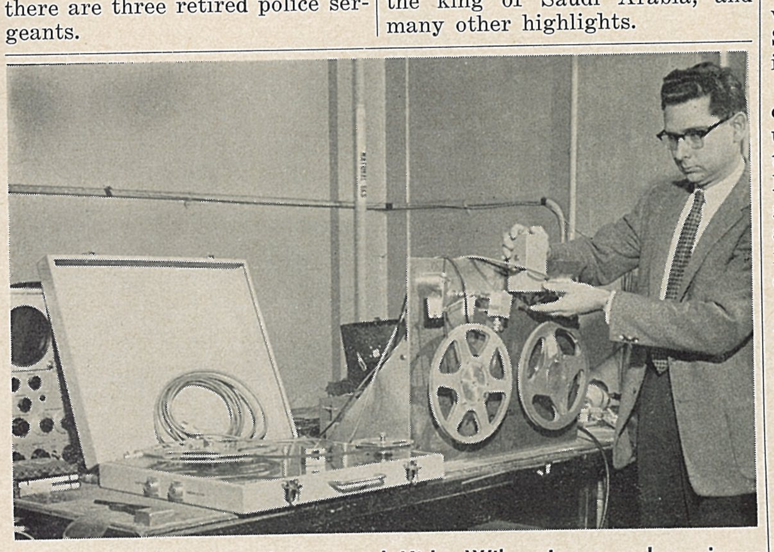
For the record there are only two official guard chiefs. One is Joe Mernik at the main plant. The other is H. W. Gillespie, security chief at the Sycamore Canyon test site.

But working at these two are 56 other chiefs (Navy version). They form the largest contingent of retired servicemen now working for Astro full-time in security. Also in the ranks are: 19 master sergeants; 14 chief warrant officers; nine lieutenants; one captain (Marine); three lieutenant commanders; two majors; one commander; and one lieutenant colonel. And to top it off, there are three retired police sergeants.

Among the ranks is a sprinkling of just about any skill you can name. There are former pilots (conventional, jet and helicopter), band leaders, military police, machinists, cooks, storekeepers, etc.

A check of former ratings shows the group could fill all the key assignments necessary for commissioning a destroyer escort.

Many of these military careers crossed and crossed again. Typical are three men who went around the globe (44,783 miles) with Navy Task Force 38 in 1947-48. All were assigned to the USS Valley Forge. W. F. Maguire, now a security captain, and guards B. A. Polen and B. L. Bolten often swap yarns about such events as a dinner given by the king of Saudi Arabia, and many other highlights.



TWO HATS—Four days a week Kirby Wilson is research engineer at Convair Pomona. Two days each week he instructs physics at Harvey Mudd College. Wilson, whose dual employment has company "blessing," is shown here at work in Convair Pomona physics lab with instrument which measures and records heat over extended periods.

Engineer Leading a Double Life Between Classroom and Lab

Kirby Wilson of Convair Pomona's engineering thermo-mechanics group is currently "wearing two hats."

Mondays, Tuesdays, Thursdays and Fridays he works as a research engineer at Convair Pomona. Wednesdays and Saturdays he teaches elementary physics at Harvey Mudd College in Claremont.

Wilson began his "dual life" several weeks ago, when a member of the college faculty became ill. College authorities asked Convair to supply a temporary replacement. Wilson, who taught similar courses as a graduate assistant while working toward his master of science degree in physics at the University of Wisconsin, agreed to take the position.

In the meantime, the faculty member for whom Wilson was substituting has resigned because of his health, and Wilson will continue teaching until a permanent replacement can be found, or until the end of the current school year next June.

Wilson, who also received a bachelor of science degree in electrical engineering from the Milwaukee School of Engineering, has been with Convair Pomona since May, 1957. His dual employment is in keeping with Convair's policy of close cooperation with educational institutions.

Little Big Horn

Custer's E Company, 7th U.S. Cavalry Of 1876 Rides Again in Ghost Patrol

Since June 25, 1876, when Gen. George A. Custer's troops were completely wiped out in the Battle of the Little Big Horn, there has never been an E Company, 7th U. S. Cavalry.

Not until three years ago, that is, when five men—including Convair Pomona's Carlos Perryman (Dept. 3)—with mutual interest in all things pertaining to the horse cavalry decided to organize a fraternal organization patterned after Custer's own troop.

Since then the organization, which is legally incorporated under the name "E Company, 7th U. S. Cavalry, Ghost Patrol," has grown to include 45 men. The company—cavalry units were not designated as "troops" until a later date—has its headquarters at Knotts Berry Farm, and meets there the first and third Sundays of every month. It is not connected with the farm in any way, however, Perryman said.

"We are strictly a military organization, and we usually spend about seven hours in dismounted drill at every meeting," Perryman, who holds the rank of corporal, said. "Once a month we go out on the desert near Chatsworth for mounted drill."

The unit wears uniforms and uses equipment from the period of 1870 to 1880. Every article is authentic, and much of the equipment is actual issue equipment from the period.

"All of our leather equipment, except for our boots, is original, and our metal equipment—insignia, belt buckles, etc.—is issue equipment from the period," he said. "All of our drills are those used during the 1870s. This really presented a problem, because practically all of us are veterans. We had to 'unlearn' the modern drills, and learn the older one, and this really led to confusion."

All members of the unit are constantly on the lookout for military relics from the 1870s and 1880s, and as a result have accumulated quite a collection. Some time ago they set up a cavalry museum in their headquarters building at Knotts Berry Farm, which is open to the public each Sunday. The museum collection is valued at over $10,000.

Perryman recently acquired a complete set of cavalry officer's uniforms, from second lieutenant through colonel, from the period. He is frequently called upon to give talks about his organization, and on these occasions he dresses in the uniform of a lieutenant colonel.

He also has three sabers, a 45-70 Springfield cavalry carbine, model 1873, and a U. S. Army Colt .45 pistol, model 1873-P.

Although he cannot wear his officer's uniforms to the meetings of the company, he has complete field and garrison uniforms of an enlisted man.

The unit has appeared on television shows, and has had offers from the motion picture studios, though all of the offers have been declined.

Perryman served with the Army for three years during World War II, including 19 months with the "horse cavalry" at Ft. Riley, Kan. He has been with Convair as a guard for about three months.



GHOST PATROL—Carlos L. Perryman, guard at Convair Pomona who belongs to unique organization patterned after cavalry unit of 1880s, is shown at left in uniform of cavalry lieutenant colonel of that period, showing saber of same period to Robert Balzer (Dept. 31) and Jim Moore (Dept. 6). Balzer is commander of Ontario American Legion Post, while Moore is commander of Upland Post.

Grandson Recalls Triumphs Of Madame Schumann-Heink

"Kings, presidents, and street-sweepers, Madame Schumann-Heink loved all God's children and felt it was her obligation to use her God-given voice for the pleasure of people in all walks of life."

This is the recollection of the world-famous diva treasured by a Convair man, Hans Heink, superintendent of GFE at Astronautics MSTS.

Heink has many memories of the great lady known as the world's greatest coloratura, for Madame Schumann-Heink was his grandmother. It was through her influence that Heink, his mother and his sister were permitted to enter the United States in 1919 as the first Germans to be admitted legally at the end of World War I.

It took a special act of Congress to authorize their entry, an act passed in gratitude for Madame Schumann-Heink's efforts in entertaining U. S. servicemen during the war.

Heink recalls that his grandmother kept in touch with them during the war through the Steinway piano company which had plants in New York and Hamburg, Germany. The company officials relayed personal messages and delivered money which Madame Schumann-Heink sent to her relatives in Germany by placing a large "order" with the Steinway New York office. Actually, his grandmother never bought pianos; they were always the gifts of admirers, Heink said.

One of the treasured pieces in Heink's home is a Steinway given to Madame Schumann-Heink early in the 1900s for use in her private railroad car. Over the piano hangs a framed wreath of gold leaves, each leaf inscribed with the title of one of her operatic roles. The wreath was presented to her on the stage of the Metropolitan Opera Co. in commemoration of her 50th anniversary as an opera star.

Exhibited atop the piano are a number of other family heirlooms, including a photo of Madame Schumann-Heink, and a miniature polar bear. The little white bear has a story all of its own, for this was a good-luck piece that Heink's father, a member of the German Imperial Navy, always took with him on sea voyages. The single exception was his last tragic voyage when he had a premonition of his death and left the bear behind for his young son.

Next to the piano stands a traditional German grandfather's clock, a gift from Heink's mother to his father.

Heink was 11 when he left Germany and arrived in California where he often accompanied his grandmother on concert tours. He recalls that the great artist was an ardent champion of democracy and was exceedingly generous with her great wealth and her great voice, using both for the benefit of others until her death in 1936.

One of her well-known characteristics was a tremendous appetite. On one occasion, Heink recalls, she had just been served a steak of tremendous proportions when Enrico Caruso (also known as a great singer with an appetite to match) passed her table. He inquired, "Are you going to eat that steak alone?" And she replied, "Oh no, they are bringing the vegetables."

Heink, who transferred to Astronautics MSTS a year ago, joined Convair San Diego in 1941 as a dispatcher. He left the company in 1945 but rejoined two years later. Transplanted from La Jolla, Mr. and Mrs. Heink and their two children now reside in Lancaster.

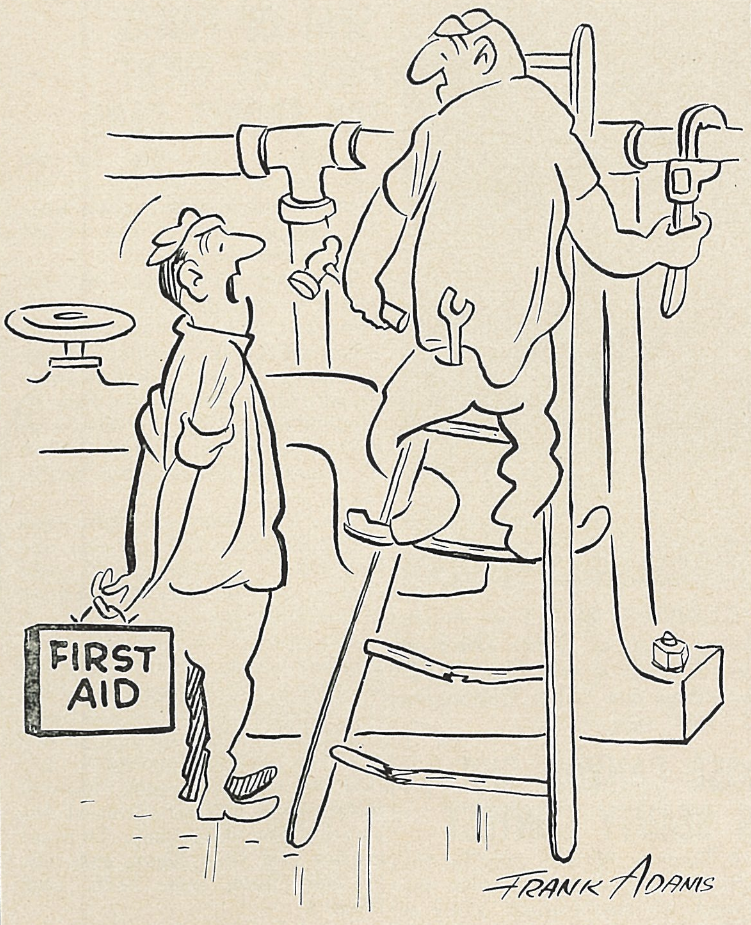


SINGER'S GRANDSON—Hans Heink (MSTS, Dept. 575) seated at piano left him by his grandmother, Madame Schumann-Heink. On top of piano is miniature polar bear left by his father, photo of Madame Schumann-Heink, and above piano gold wreath presented to her at Metropolitan Opera.

Rules to Guard Safety Of Employees Listed

(Following are general rules laid down by Convair for the protection of its working forces. Although handed to all new employees during their indoctrination, a "refresher course" for others may be of value.)

1. Do not turn on, use, repair or operate any machine, tool, vehicle, crane or electricity, gas, steam, air, acid or caustic or other dangerous material or equipment unless you have specific authorization to do so by your supervisor.
2. Safety guards and devices are provided by the Company for your use and protection. Removal or non-use is prohibited.
3. Danger and Warning signs are posted for your protection. Observe and obey them at all times.
4. Protective clothing such as hard hats, rubber and asbestos gloves, rubber boots and respirators are furnished by the Company and must be worn on jobs requiring this type of protection.
5. Safety glasses or goggles must be worn at all times when grinding, sawing, drilling or chipping. Face shields must be worn at all times when pouring hot metal, handling acids or caustics. In addition, in doing any other work where eye or face protection is necessary, the proper equipment shall be worn.
6. Report all plant injuries, regardless of severity, to the nearest First Aid Station immediately. Never attempt self-treatment. A slight injury may become infected if not properly treated.
7. Horse play, scuffling, running, and practical jokes in the plant are prohibited.
8. Before leaving a machine be sure the power is off. If authorized to clean or repair machinery or equipment, before starting the work be sure to lock the switch in "OFF" position and place "Men Working" sign on switch. Do not remove your lock until you have completed the job.
9. Use compressed air only on work requiring its use. Do not clean your clothing, benches, floors or release air close to the body of yourself or fellow worker.
10. When using mechanical means for lifting or hoisting, never lift more than the capacity of the crane or hoist. Use proper sling and stand clear of the load. If you are not sure, stop and ask your supervisor.
11. Do not pile or leave tools or loose materials on ladders, scaffolding, or stairs.
12. The use of makeshift equipment is prohibited. Be sure you have the proper tool, fixture, ladder, platform or other equipment before starting a job. When working on high elevations from which you might fall, safety belts shall be worn.
13. High speed grinders shall only be used when authorized by your supervisor. Be sure the correct wheel and guard is provided for the job.
14. Certain solvents have been purchased to do specific jobs. Contact your supervisor for the correct one to be used and be sure that adequate ventilation is provided. Flammable liquids shall be kept in safety cans and should not be used to clean benches, floors, etc., or to clean hands or other parts of the body.
15. Loose or torn clothing, sleeves, tails, ties, lapels, cuffs, wristwatches, rings or other jewelry shall not be worn around moving machinery.
16. Hand tools are to be used only for the purpose for which they are designed. Return defective or unsafe equipment to your supervisor.
17. The wearing of open toe, open heel, or high heel shoes in the shop is not permitted. Sandals, sneakers, huaraches, canvas-top shoes, or similar footgear are NOT permitted in the factory area.
18. Women are to wear approved hair covering when working around revolving machinery or equipment.
19. Your supervisor will inform you of additional safety rules necessary to safely perform your job. If in doubt, STOP!—and ask your supervisor.



"I was sent to help you in any way I could . . ."

F-106A Flies To Alaska for Cold Testing

An F-106A has flown to the Far North for a series of cold weather tests.

The plane arrived at Eielson AFB, near Fairbanks, Alaska, two weeks ago (Dec. 22) for Phase V of the test program during which the craft and ground support equipment will be put through their paces in severe cold weather conditions—at temperatures to 40 degrees below zero.

Capt. T. R. Bogan, pilot, was at the controls when the F-106A left Wright-Patterson AFB, Dayton, Ohio, on Dec. 21 for the flight north.

On hand to greet the plane at Eielson were Major J. C. Gordon, task force commander; and two Convair SD field representatives, W. D. Nowell, in charge of ground support equipment; and E. P. Griesell, spare parts.

Dave Johnson, field service engineer, who, as Convair's technical assistant, has been with the plane since it began the test series, accompanied the Alaskan flight aboard a C-97.

Following climatic hangar tests at Eglin AFB, Fla., this fall the F-106A was in Palmdale for aircraft and radar modification.

Cold weather testing at Eielson is expected to continue for at least two months.

Atlas Seen Overhead In South Africa City

K. J. Bossart, assistant to Convair vice president-engineering and a key man in early development of Atlas missile, received this message shortly before Christmas from his sister, Dora Scott, in Bloemfontein, Union of South Africa:

"Congratulations splendid achievement. Saw Atlas right over our heads . . ."

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., airframe and missile builders.

Electric Boat of Groton, Conn., submarine builders.

Stromberg-Carlson, of Rochester, N.Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N.J., electric motors, generators.

Electric Boat-Built Submarine Skate Joins U. S. Fleet, Six Months Ahead of Schedule

GROTON — Six months ahead of schedule, the Navy's third nuclear submarine, Skate, joined the fleet last month.

She was commissioned Dec. 23 at the shipyard of General Dynamics' Electric Boat Division where she was built. Skate is the third atomic submarine. Seawolf was commissioned in March, 1958, and Nautilus was commissioned in 1954.

The Navy now has authorized a total of 19 nuclear submarines in its program.

Skate is the first of four nuclear subs designed for assembly-line production. She is 267 feet long and displaces 2,190 tons. Under command of Cdr. James F. Calvert, USN, she began builder's trials Oct. 27 and performance was termed "outstanding" by the Navy.

At commissioning ceremonies, Carleton Shugg, Electric Boat general manager, delivered the vessel and Rear Adm. M. E. Miles, USN, Third Naval District commandant, commissioned her.

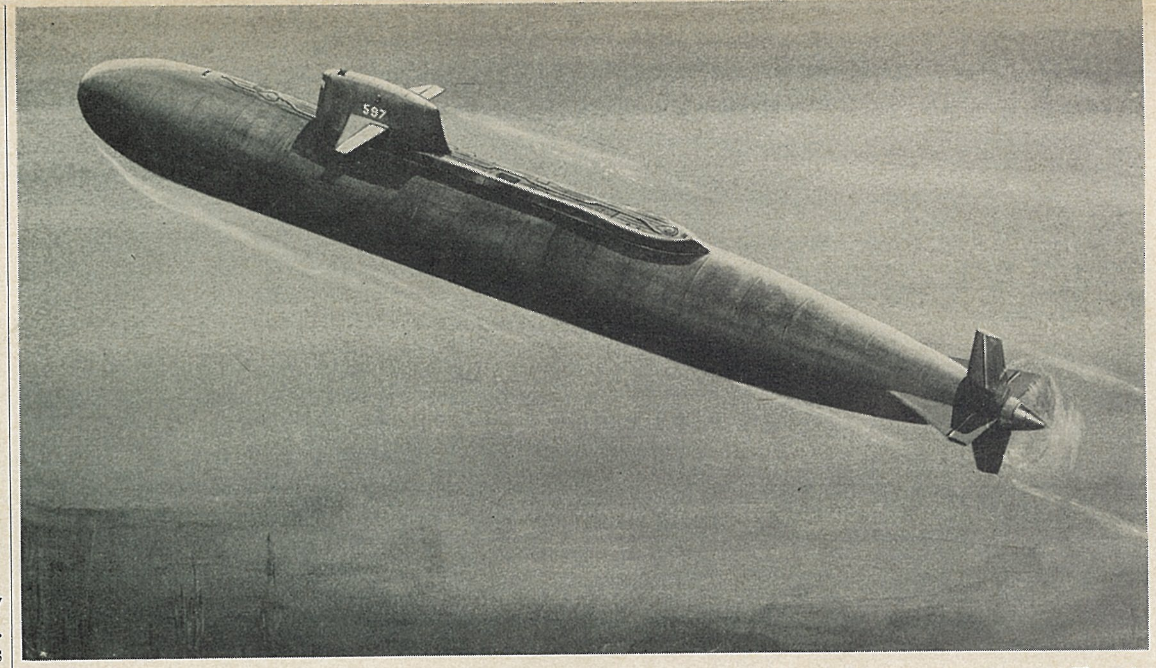
Skate was originally scheduled for completion in mid-1959.

Austria Purchases Gen. Atomic Reactor

SAN DIEGO—The Republic of Austria, through its Ministry of Education, has purchased a research and isotope-producing nuclear reactor developed by General Atomic at its John Jay Hopkins Laboratory for Pure and Applied Sciences here.

Called Triga, the reactor will serve universities and technical high schools. It is expected to be operating in late 1959.

A Triga was part of the U.S. exhibit in Geneva last September and subsequently was bought by the Belgian Congo for the University of Lovanium.



SUB HUNTER—Artist's conception of Tullibee, nuclear submarine under construction at Electric Boat, was released by General Dynamics last month. Smallest atomic sub yet built, Tullibee is 260 feet long, displaces 2,175 tons, is designed to seek and destroy enemy submarines.

First Flights Near For Prototypes Of Canadair's New 540 Transports



SNOWBALLING—SD men at Canadair are, from left, Jerry Dugan, assistant project engineer, John Ready, project engineer, Ash Bishop, tooling assistant foreman. They have been assisting in Canadair's 540 project. During last few weeks of Bishop's stay mercury remained around zero!

A few picked production men from Convair SD are likely to go to Montreal this spring to assist Canadair in work on the Canadair turboprop version of the Convair 440.

The new airplane is known as the 540 and CL-66.

Two prototypes (440s converted to turboprop Eland 6 engines) were nearing completion last month with first flight expected soon.

The Canadair 540 will have a gross weight of about 53,200 pounds and a cruising speed of 325 mph.

Ash Bishop, SD assistant foreman in tooling, returned from Montreal in December after four months assisting in the shift of tooling from SD. Jerry Dugan, SD assistant project engineer, will remain at Canadair until May.

Bishop reported that manufacture is progressing well on the 540 with fuselage belt frames being assembled and first noses taking shape.

"The tooling that we shipped to Montreal has been worked over as necessary and really looks 'beautiful,'" Bishop said.

"Canadair people take great pride in their workmanship and, believe me, it shows in quality. They are setting a very high standard for Canadian industry."

Bishop said there is no such thing as a "stranger" at Canadair. The people are most friendly and hospitable. Though virtually all with whom he had business spoke English, there is a high percentage of Canadair folk who speak mainly French. It is the language most heard in the shop. Blueprints are in English but most bulletins, etc., are in both languages.

"Their plants and equipment are kept in top condition and housekeeping is excellent," Bishop continued.

Award at SD Rises to $890

The final installment of the largest Employee Suggestion award ever earned by a woman employee at Convair San Diego —$890.60—will be handed to Lorrain D. Clark (Dept. 230) next month.

Her suggestion on sealant kits (**Convairiety, Aug. 20, 1958**) which was put into operation last summer will net Lorrain a final check for $313.40. It is the second largest award paid by any Convair division to a woman employee. (Fort Worth holds record with an award of $1,220.)



Lorrain Clark

Lorrain says the check will join other suggestion awards she has received—all of which are in the bank.

During the last four years she has submitted other ideas, three of which were put into effect. They bring her ES earnings to a grand total of $1,142.50.

"I've discovered that often good ideas are hit upon, but quickly dropped and forgotten in the flurry of the day's activity," she said. "The secret seems to be taking action on them and submitting them through the suggestion program."

'Award' Ranks Up to Twenty For Top CIPs

Eight more candidates have qualified for the annual "President's Award" at Convair SD to make a total of 20 now in the running for recognition of outstanding cost reduction achievements.

The additional CIP contributors, each with more than $25,000 savings to his credit, have boosted the total savings to the company in installed CIPs to over $1,100,000, said E. E. Hartzler, cost reduction supervisor.

Joining the original list of qualifiers are E. E. Day, Dept. 223; R. D. Foster of Dept. 328 (Palmdale); H. A. Kayes, Dept. 91; A. H. Springer, Dept. 218; S. S. Stearns, Dept. 267; E. D. Fountain, Dept. 223; J. G. Saftig, Dept. 230; and G. H. Wilson, Dept. 231.



CONVAIR ENTRY — Pretty Nancy Hom of Dept. 188-8 at Rose Canyon is only Convair SD contestant for "Miss Chinatown of 1959" title.

ROSE CANYON GIRL IN BEAUTY CONTEST

A Convair SD girl may be the first "Miss Chinatown" with the revival of the contest after a lapse of 20 years.

Nancy Hom of Rose Canyon receiving inspection (Dept. 188-8) is one of eight contestants for the 1959 title. The winner will be crowned at a coronation dance climaxing the Chinese New Year on Feb. 14.

Nancy, 21, is a native San Diegan and the daughter of Mr. and Mrs. C. K. Hom. She is a graduate of San Diego High School where she performed as a majorette during her last two years. She has been at Convair SD since November, 1956.

Acting as her business manager during the contest is Kim Hong (Dept. 6-5), while another Convair SD man, James C. Hurley (Dept. 25), is her personal photographer.

All the girls wear bright-colored mandarin dresses of Chinese silk for their public appearances.

Convair Man Holds Lead at Old Globe

Veteran Convair San Diego actor, Burt Miller, is cast in the lead role of the "Happiest Millionaire" which opened at the Old Globe Theater in Balboa Park last night.

Miller (Dept. 5) plays the role of the fabulous Anthony J. Drexel Biddle, a millionaire who doesn't let his money interfere with having a good time.

'SEAT OF PANTS' FIRST '59 EVENT FOR SPORTS CARS

Sports car activities for the new year at Convair SD are expected to start with a rush when the annual "Seat of the Pants" rally is held Jan. 18.

Well over 100 cars are expected to take part in the event. Trophies will be awarded to every sixth car in both Convair and guest classes, based on number of entries received by Jan. 13. In addition to usual selection of dash plaques, special trophies will be awarded novices and beginners.

Cars will leave the Astronautics parking lot at 12:31 p.m. and traverse a 75-mile paved road course. Entire rally is expected to last three hours.

A watch will be the only navigational equipment necessary and odometers will be covered by the rally committee before starting.

Entries received by Jan. 13 will receive acknowledgement and starting time by mail. General instructions will be given at the starting line at 12 noon. To place entries call Dick Elms, ext. 626, or Bob Dunn, ext. 1846, both Plant 1.

Shop Basketball To Start Friday

Shop league basketball at Convair SD will swing into play this Friday (Jan. 9), first game at 6:30 p.m. in the Muni Gym, Balboa Park.

Commissioner Gil Crosthwaite said one more team is needed to fill out a six-team league. Entry, on a first-come, first-served basis, can be made by calling ext. 1245, Plant 1.

Departments fielding teams include Manufacturing Control, Dept. 6 (electrical), Dept. 6 (flight test), Dept. 603 (tooling), and Dept. 25 (plant engineering).

SD Junior Achievers Tour Plants 1 and 2

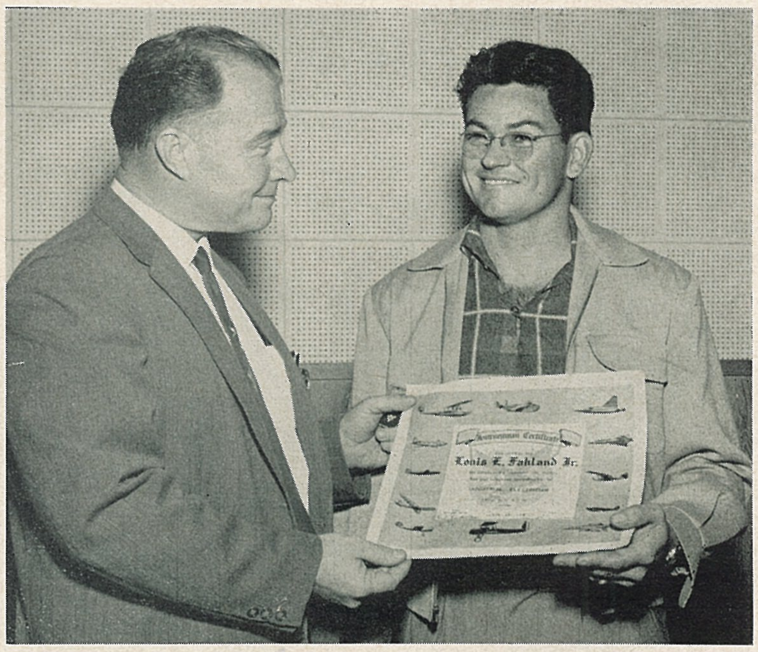
The 30-odd high school youngsters of the two Convair SD-sponsored Junior Achievement companies were given the VIP treatment last week on a guided tour of SD Plants 1 and 2.

They saw both the 880 jet transport and F-106 interceptor assembly lines during the day's visit as well as the wind tunnel, model shop, analog computer, and 880 wooden mockup. They were hosted at luncheon in the Plant 2 cafeteria.

Lost Anything? Try Employee Services

Have you lost your glasses or keys lately and don't know where to find them? Try "lost and found" at Convair SD Plant 1 employee services counter.

Now reposing in the drawer are several pair of prescription glasses, dozens of keys, jewelry of all kinds, odd gloves, etc., waiting for owners to claim them.



NUMBER TWO—Louis H. Fahland Jr. is second Convair SD man to earn industrial electrician journeyman certificate through apprenticeship program. Assistant plant engineer, Vern Sharp, made presentation last month.

Broadway Scores 3,341 Points To Repeat as Pistol Champion

Taking the title for the second consecutive year, B. L. Broadway (Dept. 603) has been named the Convair San Diego Pistol Club champion for 1958, Commissioner Ash Bishop announced this month.

Broadway scored a total of 3,341 points out of a possible 3,600 in the short national match events conducted by the club during the year. Nearest rival was Joe Williamson (Dept. 401) with 3,231 points.

Both Broadway and Williamson are also included on the new pistol team roster for the first quarter of 1959. Other members of the team include Jim Halfacre (Dept. 180), Bill Dittmann (Dept. 6), and Ralph Picard (Dept. 31).

Results of the .22 caliber pistol matches held Dec. 28 are as follows: master class, Ray Groth (Dept. 25), 294; expert, Jim Baxter, 276; sharpshooter, R. D. Miller (Dept. 600); marksman, R. G. Lair (Dept. 406), 231.

Jim Halfacre's 262 score was good enough for top honors in the .45 caliber short national match event.

Divers Set Boat Excursion Date For Island Trip

Delta Divers from Convair San Diego will board boats at Shelter Island at 9 a.m., Jan. 18 for an excursion to the Coronado Islands.

The all-day jaunt is priced at $3.50 for members and $6 for guests. Commissioner Tom Richardson said ample room for storage of aqua lungs would be available on the boat.

Reservations and additional information can be obtained by calling Allen Jones, ext. 146 or John Griffith, ext. 2229, both Plant 1.

On Jan. 1 the Delta Divers stayed in keeping with the winter spirit when they held their annual Polar Bear Dive at the Casa Cove in La Jolla.

Warmth-providing rubber suits were not allowed, Richardson said.

SD Is Operating New $250,000 Test Facility

A new $250,000 testing facility for the Convair SD dynamics laboratory will be put into use this week after completion the last of December.

The high temperature hydraulic and pneumatic laboratory building (Bldg. 79), located just south of the 880 wooden mockup building (Bldg. 69), will allow all hazardous hydraulic and pneumatic control system and component testing to be done in one location.

The one-story, 7,150-sq. ft. building contains seven test cells and one main control room. Two of the cells designated for hydraulic system development will be equipped with test chambers which will be capable of simulating environmental temperatures ranging from 300 to 1200 degrees F. at simulated altitudes from sea level to 100,000 ft.

Test cells are built of 12-in. reinforced concrete walls with visual windows of 2-in. bullet-proof glass. Roof and doors of cells are of blow-out type construction.

M. C. Brady, dynamics lab supervisor, is in charge of the new testing facility with H. B. Vollmer directly responsible for tests conducted in the building.

TIMEKEEPERS RAISE $392 AT CHRISTMAS

Timekeeping section of Dept. 93, Convair SD Plants 1 and 2, raised $392.85 for its two Christmas projects this year.

Proceeds from the raffle of a novelty lamp donated by June Scott raised $70.

The greater share of the collection went to Mary Trotter, SD timekeeper, to help with cost of treatment for her two children, afflicted with cystic fibrosis.

'Frigid Idjits' Receive Diplomas

A stalwart group of Convair SD water skiers spent their New Year's Day braving the "sub arctic" waters of Mission Bay.

Candidates appeared on the beach dressed in swim suits only. Commissioner Tom Mathews said coffee was administered to the "frigid idjits" after their solo ride around the regular course.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Jan. 1 through Jan. 15:

Twenty-year: Dept. 6-51, T. H. Chadwick; Dept. 120, Frank Lesinski; Dept. 188, D. R. Kern; Dept. 400-1, R. A. Way.

Fifteen-year: Dept. 5, H. C. Leppart; Dept. 14-4, L. D. Veall; Dept. 31, F. E. Anderson, W. D. Ogilvie; Dept. 98-8, W. G. Kemmer, S. V. Silva; Dept. 102, Mae K. Moore.

Dept. 136, T. H. Parker; Dept. 149, J. T. Klecan; Dept. 188-3, J. B. Rosebush; Dept. 204, I. T. Andrews; Dept. 216, Ruby B. Dean; Dept. 271, G. A. Brotherton; Dept. 407, D. D. Trout; Dept. 600-2, K. J. Munger.

Ten-year: Dept. 1-41, F. E. Hamlin; Dept. 14, H. K. Kirkwood, Jerome Zatarian; Dept. 15-5, C. F. Kosen; Dept. 25-1, D. H. Eldridge, F. J. Olin; Dept. 31, J. W. Gordon.

Dept. 91-0, Ivy M. Oliver; Dept. 97-6, L. D. Boyles; Dept. 101, P. C. Torres; Dept. 144, R. W. Gapen; Dept. 148, R. L. Romero; Dept. 218, S. G. Ater, C. F. Whitlock; Dept. 231, Lena J. Ross; Dept. 333 (Dayton), J. D. Stevenson; Dept. 403, R. H. Cowie.

Retirements

SAN DIEGO

HICKOK—F. P., Dept. 400. Seniority date Nov. 8, 1950, retirement effective Dec. 29, 1958.

JOHANNIS—H. A., Dept. 603. Seniority date July 19, 1950, retirement effective Dec. 23, 1958.

JOHNSON—J. L., Dept. 25. Seniority date Nov. 25, 1941, retirement effective Dec. 29, 1958.

MUNSON—E. R., Dept. 600. Seniority date Sept. 1, 1950, retirement effective Dec. 29, 1958.

OWEN—C. W., Dept. 218. Seniority date Sept. 11, 1950, retirement effective Sept. 17, 1958.

PAYTON—H. B., Dept. 11. Seniority date Jan. 5, 1942, retirement effective Dec. 23, 1958.

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective Dec. 22, 1958:

Dept. 14-1, Traffic & Material Stores: To receiving & stores asst. foreman, C. E. Birch.

Dept. 171, Field Operations: To asst. foreman, E. M. P. Becker.

Dept. 216, Electric Bench & Fabric: To asst. foreman, F. C. Buzzelli.

Dept. 292-3, Manufacturing Control: To M/C foreman, C. B. Hill.

Personals

SAN DIEGO

We wish to thank Convair employees for the beautiful flowers sent at the time we lost our beloved husband and father, C. E. Alexander, Dept. 600-3.

Ruth and George Alexander.

Births

SAN DIEGO

ESPINOSA—Son, Victor V., 6 lbs., 11 oz., born Dec. 22 to Mr. and Mrs. Ruben Espinosa, Dept. 603.

LAMB—Twins: Son, Duane Robert, 5 lbs., 3 oz.; daughter, Elaine Roberta, 4 lbs., 5½ oz., born Dec. 28 to Mr. and Mrs. J. H. Lamb, Dept. 406-7.

RIVERA—Daughter, Carol Ann, 8 lbs., 5½ oz., born Dec. 9 to Mr. and Mrs. Tony Rivera, Dept. 139.

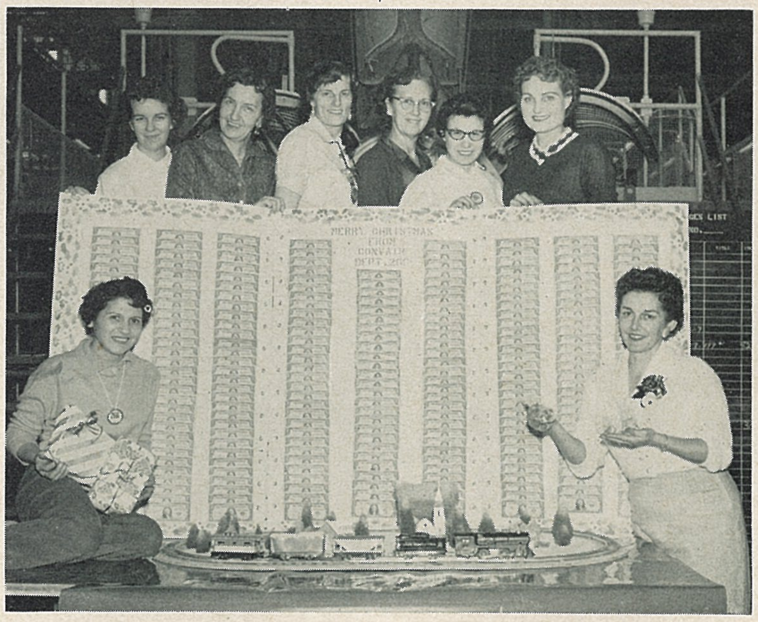
ZACHARY—Daughter, Barbara Jean. 6 lbs., 11 oz., born Nov. 19 to Mr. and Mrs. C. D. Zachary, Dept. 145.

Lost & Found

SAN DIEGO

FOUND—at Cost Accounting Christmas dance, San Diego Hotel, Dec. 5. snap-on gold bracelet set with colored stones. Owner contact Bob Macomber, Dept. 93, ext. 2225, Rose Canyon.

FOUND—Convair 15-year pin mounted on tie clasp. Gold with red stone. Found vicinity of Louisiana St. and El Cajon Blvd. Dec. 20. Call Glen B. Baker, CY-6-4386.



"MONEY" CARD—A huge Christmas greeting card was filled with greenbacks ($340 worth) by Dept. 266, Plant 2 at Convair SD, for their "adopted" family. In front, left to right, are Lena Culmone and Eve Ulsund; (standing) Jesse Hays, Ruth Moss, Alice Lyons, Adeline Hopster, Vivian Jasper, and Penny Griffith.

First Code Class Starts Tomorrow

Ed Warns, member of the Convair SD Radio Club, will instruct members and guests on International Morse Code requirements for FCC exams at the next meeting of the club tomorrow (Jan. 8) 7:30 p.m. in the group's headquarters on Harbor Drive.

The code and theory class will be open to all Convair SD employees. Warns will use a novel "mental reinforcement" method of direct learning, success of which he has proved in the past.

Warns claims his course is ideal for beginners, those who wish to review, and others who have encountered difficulty in learning the code.

More information may be obtained by calling Commissioner J. B. Baker, ext. 745, Plant 1.

Golf Calendar For Next Year

(Joint events indicated by asterisk. CGC stands for Convair Golf Club. CRA-SD stands for San Diego Division event.)

★ ★ ★

Jan. 17-18, CRA-SD sweepstakes, Rancho Santa Fe (see note).

Jan. 24-25, CGC sweepstakes, Balboa.

Feb. 7-8, CRA-SD sweepstakes, Flying Hills.

Feb. 21-22, CGC sweepstakes, Rancho Santa Fe.

March 7-8, CRA-SD sweepstakes, Bonita.

March 21-22, CGC sweepstakes, Caliente.

April 4-5, 11-12, Yater Memorial, Flying Hills, Rancho Santa Fe.*

May (dates to be set later), Industrial Assoc. Match Play.*

June 7, 14, 21, CGC championships, Flying Hills, Torrey Pines, Rancho Santa Fe.

July 11, 12, CRA-SD sweepstakes, Balboa.

July 25, 26, CGC sweepstakes, Circle R.

Aug. 8, 9, CRA-SD sweepstakes, Circle R.

Aug. 22, 23, CGC sweepstakes, Torrey Pines.

Sept. 13, 20, 27, CRA-SD 54-hole championship play, Flying Hills.

Oct. 10, 11 CRA-SD sweepstakes, Caliente.

Oct. 24-25, CGC sweepstakes, Rancho Santa Fe.

Nov. 7-8, CRA-SD sweepstakes, Torrey Pines.

Nov. 21-22, CGC sweepstakes, Flying Hills.

Dec. 5-6, CRA-SD sweepstakes, Flying Hills.

Dec. 19-20, CGC sweepstakes, Bonita.

NOTE: CRA-SD players must compete in January, February, March, and April tournaments to qualify for Convair inter-division matches to be held April 19 and May 24. The former to be played at Gilman Hot Springs and the latter at Circle R.

FIRST '59 GOLF CLUB SWEEPS SET

Registration for the Convair Golf Club sweepstakes Jan. 24 and 25 at Balboa municipal course is now open. Entries can be made by calling Alma, ext. 218, Plant 2. Memberships will be taken at the first tee both days.



ROCKHOUND "JEWELERS" — Lower photo is collection of "home-made" earrings, work of Hal Leppart (SD Dept. 5). Most of stones represented were found by Leppart on rock hunting expeditions. Above, Keith Sears (on left), Dept. 3-2, and Jerry Heslop (Dept. 400) take time out from grinding to examine stone mounted on "dob" stick.

Rockhounds Spend Busy Hours Turning Stones Into Jewelry

Convair SD's Rockhound shack and local department stores had one thing in common last month. They both felt the "Christmas rush."

Upwards of 15 persons per evening spent hours at the shack slabbing, grinding, finishing and polishing precious and semi-precious stones. Off the "production line" rolled cuff links, tie clasps, earrings, necklaces, bracelets and rings.

"They make beautiful presents," said Hal Leppart (Dept. 5), veteran Convair lapidarist. "And like anything that's handmade and shows individual craftsmanship, they mean just that much more to a close friend or family member."

Members carry through the entire program . . . all the way from stone hunting expeditions and overnight trips in search of the raw material to actual grinding, polishing, etc., in the shack at Sassafras and Pacific.

"And it's all fun and a great family-type hobby," Leppart asserts.

"We have had beginners, after only a minimum of instruction, turn out beautiful examples of workmanship that a veteran would be proud of," he said.

All Convair SD employees are eligible to join the group. Rock hunting trips are held about once a month, and the club holds a regular business meeting the second Thursday of the month in the Natural History Museum, Balboa Park, at 8 p.m.

The shack is open Monday, Tuesday, Wednesday from 7-9 p.m., and (for benefit of second-shift people) Thursday afternoon, 12:30-3.

Jr. Marksmen Champs Chosen

Junior marksmen, ranging in age from 11-14, staged their last competition of the year Dec. 20 to decide the winners in each of four shooting positions.

The youngsters, who are members of the Junior Rifle Club at Convair SD, capped their year-long activities with the final champion-deciding shoot. Plaques were awarded.

Winners were: prone position, Mike Day (son of Eugene Day, Dept. 223, Plant 2); sitting position, Sally Horstman (daughter of Gene Horstman, Gun Club commissioner); kneeling position, Ronnie LaBorbe (son of Dave LaBorbe, Astronautics); standing position, Greg Birch (son of Ed Birch, Dept. 14-1).

The Junior Rifle Club is an accredited member of the National Rifle Association and meets at Gillespie Field the first and third Saturday of each month at 9 a.m.

Instruction in the use of the .22 caliber rifle is given the youngsters. Membership in the club is open to sons and daughters of Convair employees between the ages of 11 and 14.

Registrations can be made by calling Gene Horstman, ext. 430, Plant 1, or at home, CO-4-1461.

Tennis Match Entries Open

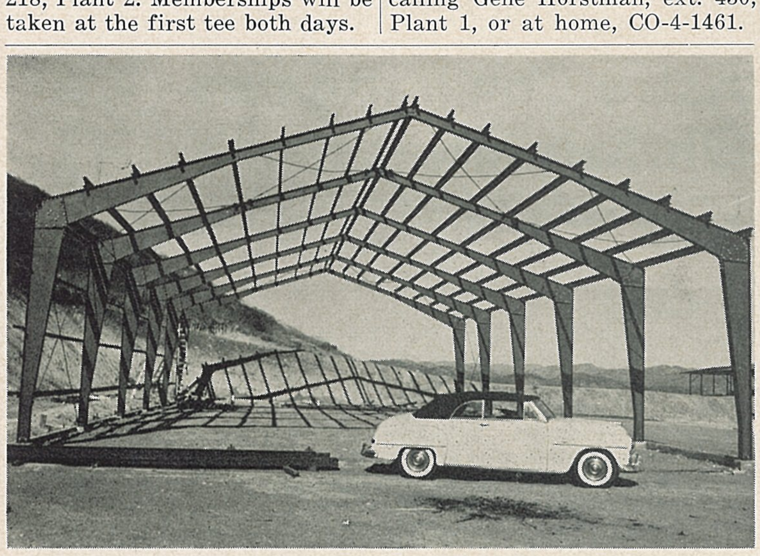
Hopes that the perpetual trophy tennis tournament set for Jan. 17 would attract a large field of entries were expressed last week by Tennis Commissioner Chet Dutton.

Registration is now open for the competition to be played on the Morley Field courts. Entries close Jan. 13.

It will mark a renewal of the perpetual trophy tourney after a lapse of many years, Dutton said. Trophies will be awarded winners of both men's singles and doubles events. Runners-up will receive special awards.

Entries should be mailed to Dick Collier, tourney chairman, 835 Loma Valley Road. They may also be phoned to him at home, AC-3-0568, or at Plant 1, ext. 1242.

Turkey winners in the round-robin meet staged by the club last month were Bill Jaynes and Lee Bergtold.



GOING UP—Silhouetted like skeleton against California sky is framework of new 50x100-ft. boat building workshop at Gillespie Field. Steel-tempered siding will be put on by volunteers this month.

CRA Sports & Recreation Convairiety

Skeet Lessons, Hunter Safety Course to Start

A course on hunter safety requirements and another for beginners and novices on skeet and trap shooting are scheduled to start this Saturday (Jan. 10).

The hunter safety course will begin at 10 a.m. while the special skeet and trap instruction will be held at 2 p.m., both at the Gillespie Field Gun Club location.

R. J. Tarver, area director and certified NRA instructor, will teach the CRA-sponsored hunter safety course which is required by California state law for all persons under 16 before they will be issued hunting licenses.

Students are asked to furnish their own guns if possible, although a limited number of club rifles are available. A 50-cent fee for ammunition is the only charge. The course is held for three consecutive Saturdays.

The afternoon instruction on skeet and trap shooting will also be under the direction of Tarver. Lessons will last for as long as the demand exists, or individual capabilities warrant.

Tarver said the instruction is "painless" and encouraged Convair employees with even a remote interest in shooting to take advantage of the lessons.

Registrations can be made at employee services, Plants 1 and 2, or by just showing up for the first classes this Saturday.

First Badminton Tourney Slated

First badminton tournament of the new year is being planned for some time in February, Commissioner Tom Richardson said last week.

Entries for the competition are now open and can be made by calling Richardson at ext. 2780, Plant 1. Trophies and prizes will be awarded in all divisions.

Regular badminton play is held every Tuesday evening 7:30-10, in the Federal Bldg., Balboa Park.

Archers Set Medal Shoot for Jan. 11

A medal competition Jan. 11 at the Kearny-Mesa range will be the first event staged by the Convair SD Archery Club during the new year. The field shoot will start at 10 a.m. and registrations will open an hour previous.

Depending on the turnout, a follow-up competition at close range animal targets may be held in the afternoon.

Next Archery Club meeting will be held Jan. 15, 7:30 p.m., in the CRA Clubhouse.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY—Medal shoot Sunday (Jan. 11) at Kearny Mesa range. Registration opens 9 a.m. Next meeting Jan. 15, 7:30 p.m., CRA Clubhouse.

BRIDGE CLUB—Master point tourney Jan. 20. Astro sessions Jan. 15 and 29, 7:30 p.m., Barcelona Hotel, 4th & Juniper Sts.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse.

DELTA DIVERS — Excursion to Coronado Islands Jan. 18. Boat leaves Shelter Island 9 a.m.

GOLF — Convair Golf Club sweeps Jan. 24-25 at Balboa course. Call Alma, ext. 218, Plant 2, for starting times. CRA tourney Jan. 17-18, Rancho Santa Fe. Call ext. 1705, Plant 1, to register before Jan. 14.

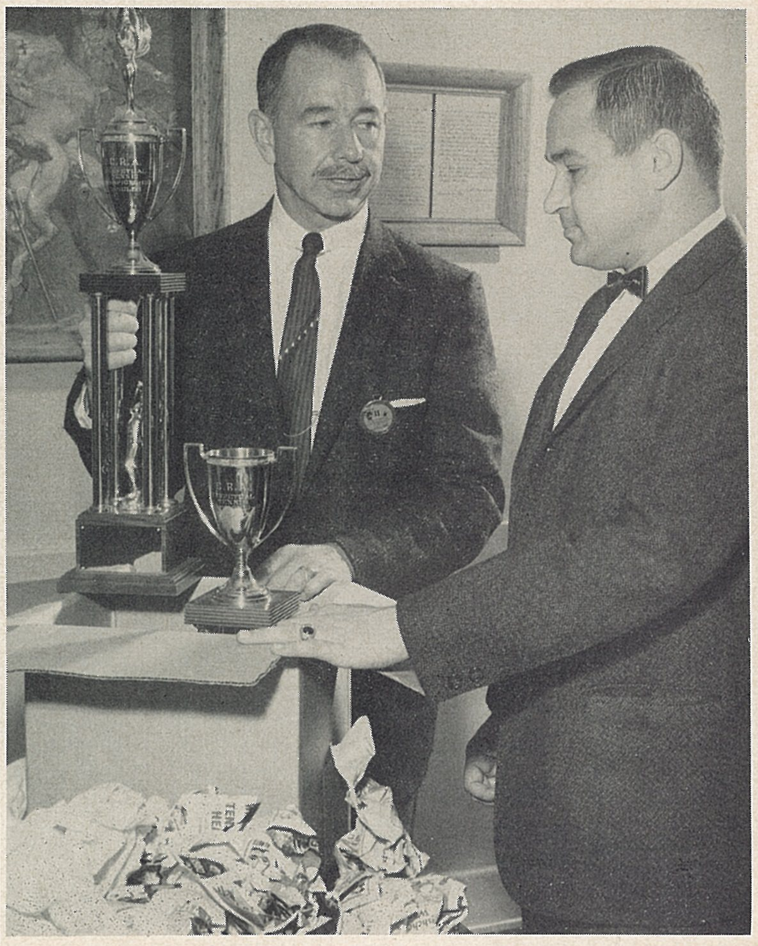
GUN CLUB—New hunter safety course opens Jan. 10, 10 a.m. Skeet and trap lessons start Jan. 10, 2 p.m., both at Gillespie Field.

MOVIES—Reduced-price movies each Friday night at Academy Theater, 3271 University Ave. Jan. 9—"Darby's Rangers" and "China Doll." Jan. 16—"Witness for the Prosecution" and "Left-handed Gun." Admission: adults, 25c; children, 10c.

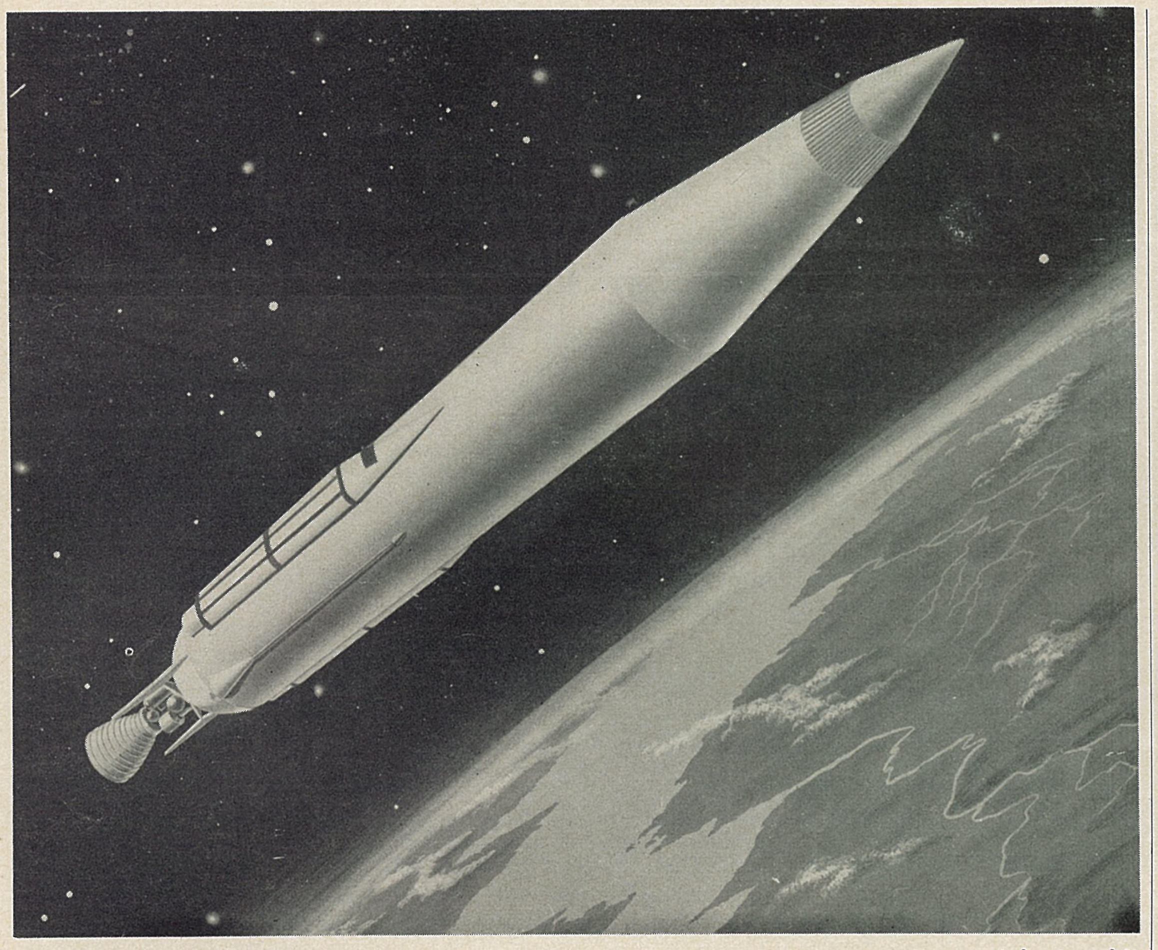
RADIO CLUB—Organizational meeting of International Morse Code class sponsored by club at Jan. 8 session, 7:30 p.m., Harbor Drive headquarters.

SPORTS CAR CLUB—"Seat of Pants" rally Jan. 18. Leave Astro parking lot at 12:31 p.m.

TENNIS — Perpetual trophy tourney entry deadline Jan. 13. Mail entries to Dick Collier, 835 Loma Valley Rd., SD.



TO THE VICTOR—Tennis Commissioner Chet Dutton (left) and Tom Berry admire perpetual trophy to be awarded winner of tourney which starts Jan. 17.



EARTH CIRCLING—Artist John Sentovic of Astronautics product support pictures Atlas in orbit thusly. Still attached to missile is one of three main engines. Two "booster" engines were jettisoned at lower altitude. The 82-foot Atlas is only rocket in western world capable of propelling itself into orbit. From time of firing to orbit was about 4½ minutes.



DURING THE SHOT—Scene is inside blockhouse during countdown for 10-B missile that went into orbit. In hard hat, B. G. MacNabb, base manager, chats with C. E. Daniher. Writing is Curtis Johnson, test conductor. At right is Travis Maloy, chief test conductor.

Satellite Secret Known To Only 16 Astro Men; A Triumph For Security

(Continued from Page 1)

a deliberate slight but was in the interest of maintaining the superlative degree of security that the government required of us."

Excluded from such knowledge were the crews who performed final pre-launch operations and the blockhouse force that conducted the countdown. Curtis Johnston directed the latter as test conductor. He reported several incidents which made him "very suspicious."

"But I had a job to do and I didn't ask questions," Johnston said.

B. G. MacNabb, Astro's manager at AFMTC, later told of "rehearsing" stories to be told to his men. These were to justify deviations from the rigid "by the book" performance of countdown.

While some Convair men may have harbored some doubts, the countdown went smoothly.

"One of our best," MacNabb said.

Tom Mahnken, Astro photographer, was in the blockhouse to maintain a film record. He reported a strict attention to all details, followed by the usual elation of a successful launch. Although the men in the blockhouse could not see the missile, they followed its performance through recording instruments.

"One man followed the performance of the sustainer engine," Mahnken recalled. "When it continued to function beyond the normal cut-off point, he started to report but Mr. Maloy (Travis Maloy, chief test conductor) was at his shoulder and told him everything was all right."

Maloy was one of the few men in the blockhouse who was "in the know."

Following the launching, most of the men went home. Only later did they learn of the feat after President Eisenhower's terse announcement.

At the Astro plant the usual number of people knew of the pending launching, although very few knew the "whole truth." Some followed pre-launch operations via teletype messages coming from Florida.

This system is unique in itself. Classified messages are typed into a machine in natural form where they are coded for transmission. At their destination, they are de-coded by another machine and typed out in normal language.

Operators thought the system had "blown a fuse" when it suddenly spewed forth messages in a garbled form. What actually happened was the machine had switched to a prearranged code, readable only to those few who held the key.

Perfection and testing of the unique communications equipment aboard the satellite was another case of many helping, few knowing.

The satellite's antenna radiation system, which allows it to receive and send both voice and teletyped messages, was designed, fabricated and tested at the Astro plant. Men in the radiation systems laboratory who did much of the work knew it simply as "another project."

George C. Tweed Jr., an electronics design group engineer, is credited with much of the design work on the system. Tweed, Vince Moffatt and John Anderson of Astro, plus an engineer and technicians from the Army Signal Corps, made the installation of the system in Florida.

"We simply didn't introduce our Army companions to those in Florida," Tweed said. "They were taken as 'more guys from San Diego.' "

One of the last rituals performed before countdown was the loading of the communications system with President Eisenhower's now-famous Christmas message to the world.

Another little known fact about the Atlas 10-B is that it carries a simple, penciled message: "In memory of Dr. Hans Friedrich."

Feb. 12 Ceremony Marks Retirement of Last B-36

The last B-36 to be built will be the last retired—and is the giant intercontinental Convair-built bomber chosen for enshrinement at Fort Worth's Carter Field.

The last B-36, which is No. 383, was delivered to the Air Force by Convair in public ceremonies Aug. 14, 1954.

Almost five years later—on Feb. 12 of 1959—it will be retired in two other public ceremonies.

At Biggs Air Force Base, El Paso, where it is still in service, the 95th Bomb Wing of Strategic Air Command is planning a special ceremony to commemorate the occasion.

Convair has been invited to participate, and a number of Convair officials will be on hand.

As part of the ceremony, three AF crew members at Biggs will be presented special awards to recognize that each has flown more than 5,000 hours in B-36s.

Closing the ceremony, the AF crew will take the B-36 on its last flight—a quick 475 nautical-mile hop to Carter Field in Fort Worth.

There the plane will be the center of attraction for its second ceremony of the day, a program arranged by Mayor Tom McCann to accept the B-36 on behalf of the City of Fort Worth.

The Amon G. Carter Foundation has announced a gift of $5,000 which will be used to build a permanent concrete apron.

The Convair Fort Worth Management Club has agreed to put the plane in like-new condition for display, and to maintain it over the years.

XC-99, Aerial Goliath, Moved To Last Resting Place at Kelly

Kelly Air Force Base people bade farewell to the Convair-built XC-99, world's largest land-based plane, this month when the plane was moved from the base after being donated to the Disabled American Veterans of Texas.

To allow passage through Kelly's perimeter fence, part of the enclosure had to be removed.

The plane was towed some 4,400 feet from its location to its new off-base site on private property west of the north end of the two-mile Kelly runway.

The aerial goliath was designed at Convair San Diego. Its fuselage was built there. Since the wings were roughly the same as the B-36, Convair Fort Worth stepped in and sent wings to San Diego on flat cars.

Flight testing for the mammoth aircraft was also performed at Convair Fort Worth.

The plane was built in 1947 and was delivered to the Air Force in 1949. It completed its final flight in March of 1957.

In its flying time, the '99 logged something like 7,434 hours and carried some 60 million pounds 1,486,000 miles. It broke 21 world records when it hauled 104,190 pounds on one flight.

Hot and Cold

Days Are Short, Nights Are Too, On Board Atlas

What's it like up there aboard the Atlas satellite?

Convairiety asked Dr. J. E. Naugle, physicist and senior staff scientist in Convair's scientific research department. Here's his opinion:

Probably the strangest sensation, at first, would be the rapid change from light to dark. That is, about 50 minutes of "day" followed by 50 minutes of "night."

Another would be that of "weightlessness." A man would float like a feather. A slight pressure against any solid object would be sufficient to send him moving in the opposite direction.

Looking down, a satellite rider could make out the earth and probably distinguish between land and water masses, but they would pass quickly. The sun and moon would still appear as small, distant, circular objects.

Over the earth would be a haze, probably dark blue in color. Above the sky would be black. The stars would not twinkle. However, any objects nearby (flying saucers?) would be in sharp focus and would stand out clearly.

Oxygen would be necessary for breathing. The side of the missile nearest the sun would be warm, almost hot. The other would be cold.

And there would likely be few, if any, meteors to dodge. Most meteorites are particles even smaller than dust.



BIGGEST EVER—The XC-99, world's largest land-based plane, is backed into site on private property west of Kelly AFB where it will be set up as memorial by Department of Texas, Disabled American Veterans.

Astro Congratulated On Satellite Launch

Following is the text of a letter from Frank Pace Jr., president of General Dynamics Corporation, to J. R. Dempsey, Convair vice president and manager of the Astronautics Division.

Dec. 22, 1958

Dear Jim:

I have waited for the time when a thorough evaluation of our Atlas satellite performance might be had to write you my own feeling. Suffice it to say that this constitutes a major contribution to our country's prestige and to the security of the free world and, incidentally, enhances the prestige of our own company.

At this time I have a strong sense of pride in my own team—its competence and its contributions—and the feeling that over and beyond our performance in the eyes of our stockholders, we have earned recognition in the eyes of our countrymen and the whole free world. So, to you, and your people, who have performed so well, my special congratulations.

Sincerely,
Frank Pace Jr.

C-V CONVAIR

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Convairiety

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Vol. 12, No. 2 Wednesday, January 21, 1959

SAN DIEGO, POMONA AND ANTELOPE VALLEY, CALIFORNIA DAINGERFIELD AND FORT WORTH, TEXAS



FIRST CREW—First men at controls of Convair 880 during initial taxi tests are, left to right, R. L. Runnalls, in charge of 880 flight test program; J. E. Moroney, senior flight test engineer; E. H. Davies, senior instrumentation engineer; R. M. Bloom, senior control engineer; D. P. Germeraad, chief pilot; J. W. Knebel, co-pilot; B. B. Gray, senior control engineer.

First 880 Flight Near as Taxi Tests Resumed

Convair's first jet transport will streak aloft on its maiden flight before the end of this month by present schedule.

At the controls of this sleek, swept-winged bird will be Don Germeraad, chief engineering test pilot, and P. M. Prophett, assistant chief engineer-flight test, as pilot and co-pilot.

Also aboard on the initial test hop will be J. E. Moroney, senior flight test engineer; E. H. Davies, senior instrumentation engineer; R. M. Bloom and B. B. Gray, senior control engineers.

After its first flight, the Convair 880 will land at the Naval Air Station on North Island. It will be based there during its initial test flights to check out flight characteristics and performance, said G. E. Putness, chief of engineering flight test.

It will be stationed at North Island for two or three weeks during which it will log its first 10 hours in the air. Convair SD field operations crews will ferry back and forth by surface craft to maintain the plane, explained Steve Barinka, 880 superintendent. About 30 men will be working on two, and possibly three, shifts to service the 880 during flight tests.

After the first four or five flights needed for the ten hours in the air, plane No. 1 will be returned to Lindbergh Field for the rest of its flight test program which will extend to May of 1960, with the exception of six to eight weeks this summer when it will be at Edwards AFB for takeoff and landing trials.

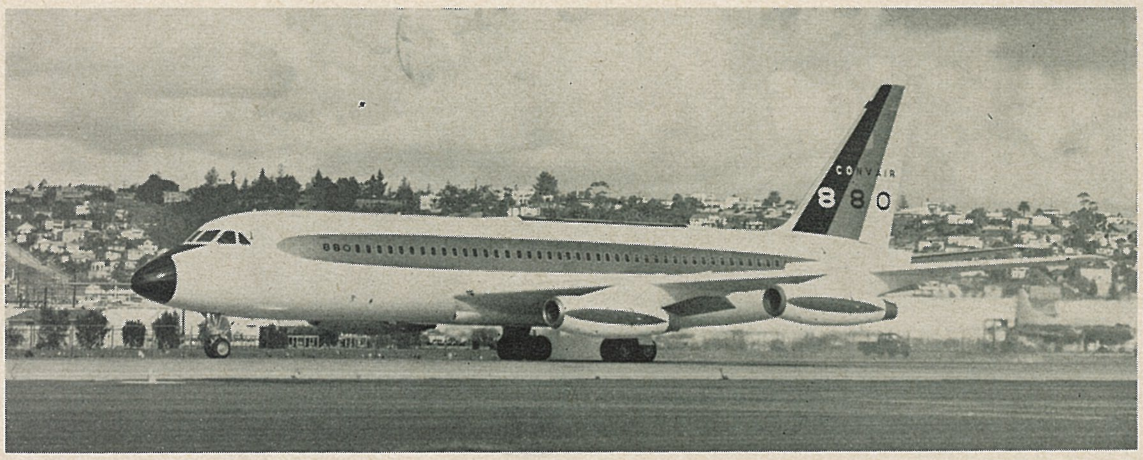
In first taxi tests two weeks ago, the Convair 880 proved to have "terrific acceleration," said Germeraad.

The plane was taxied the length of Lindbergh Field four times at speeds from 40 to 80 miles an hour. The instrumentation engineer, E. H. Davies, remarked that he was rocked back in his seat so abruptly at time of brake release while holding takeoff thrust on all engines that he had difficulty reaching the switches.

General taxiing characteristics, brakes, steering, and lateral control checked out perfectly, said Robert L. Runnalls, in charge of the 880 flight test program.

"In every way, the airplane performed in an exemplary manner," continued Germeraad. "We feel that it is one of the best planes that Convair has ever built and we are pleased and proud to be chosen to fly it.

"In fact, the entire flight crew can hardly wait to get this new plane airborne!"



880 IN MOTION—Convair SD's first jet transport now going through high-speed taxi tests on Lindbergh Field before first flight scheduled before month's end. Slow-speed taxi tests two weeks ago proved "satisfactory in every way."

Anti-Missile Work Approved

The Advanced Research Projects Agency of the Department of Defense has contracted with San Diego Division for two major studies totaling more than $2½ million on advanced ballistic missile defensive systems, B. F. Coggan, Convair vice president and SD Division manager, announced last week.

One contract with the Air Force's Air Research and Development Command is for theoretical studies and limited experimental investigation of various kinds of ballistic missile defensive systems.

Another is for basic research into the various phenomena involved in the operation of ballistic missile systems and defenses against them. After detailed negotiations between Convair and the Air Force Cambridge Research Center and the Army Rocket and Guided Missile Agency at Huntsville, Ala., the contract will be submitted to ARPA for approval.

In both contracts, ARPA will provide broad policy and technical guidance. The Air Force Air Research and Development Command and the Army Rocket and Guided Missile Agency will be responsible for detailed administrative and technical direction.

Within Convair, all the work for ARPA under these contracts will be under the direction of J. M. Pasternack. For nearly four years he has directed Convair- and Air Force-supported Wizard anti-ICBM system studies.



J. M. Pasternack

Pasternack, a native of Allentown, Pa., joined Convair's engineering department Jan. 14, 1952. He is a graduate of Rutgers University and MIT, Cambridge, Mass., holding BS and MS degrees in mechanical and aeronau-

(Continued on Page 2)

Stroud Will Head New F-108 Wing Program at San Diego Division

W. S. Stroud will head up the new F-108 wing program at Convair San Diego, B. F. Coggan, Convair vice president and SD Division manager, announced recently.

As assistant to the division manager, Stroud will be in charge of the program under which Convair SD will design and build the wing for the Air Force F-108 long-range interceptor.



W. S. Stroud

Awarding of the multimillion-dollar contract to Convair SD was announced recently by North American Aviation, Inc., who is responsible for the building of the Air Defense Command triplesonic interceptor. Convair SD was chosen from 10 competing companies because of its "design and technical capability, ability to produce, probable cost and program management," according to the statement of Raymond H. Rice, vice president of North American Aviation, Inc.

Research and design of the wing will start immediately with manufacturing development to get under way in the near future, said Stroud. However, there will be a lag of several months before direct construction is begun. Due to the type of construction involved, new designs of machines will be required which will be worked out, for the most part, in Convair's tooling departments.

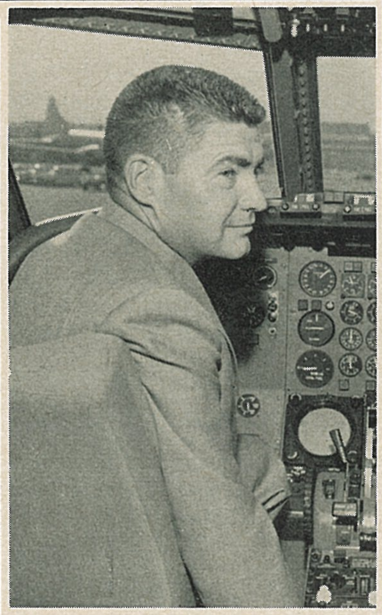
All of the tooling and manufacturing will be done at SD Plant 2 together with production of the F-106 under surveillance of J. H. Famme, Plant 2 works manager.

An eventual increase in employment at Plant 2 is expected as the program goes into production. Peak employment for the initial stages of the project should be reached by early next year, according to Stroud.

Stroud has been program control administrator in master planning since 1955, and was project administrator for the R3Y, 340, and T-29.

Other definite appointments to the program so far include J. E. Hughes, in charge of engineering; W. P. Woods, tooling; and E. F. Monsees, purchasing agent.

The F-108 will be a manned interceptor designed to launch an atomic missile 1000 miles away from its base and return in half an hour. It will be capable of speeds of over 2,000 miles per hour and altitudes of more than 70,000 feet.



JET PILOT—Don Germeraad, veteran Convair pilot and former Navy flyer, makes himself at home in jet 880 cockpit during taxi runs.

Convair Taking Applications

Applications for the annual Convair sons' scholarship program which provides undergraduate education in engineering or an allied science are being accepted now at SD and Astro.

One Astro and two SD sons or stepsons of employees who have been with the company five years or more will receive this year's scholarships. Students must be graduating from high school this year, or have graduated within the last two years.

Winners will receive awards to cover tuition and laboratory fees, and an additional $250 a year for expenses at any accredited college or university offering degrees in engineering or an allied science. The scholarships are for a maximum of five years of study.

Applications and information

(Continued on Page 2)

Rehabilitation Work Continues On Bldgs. 5, 51

The $2½-million rehabilitation of Convair SD engineering buildings (Bldg. 5 and 51) was approximately two-thirds complete at the end of the year.

So far, 1500 engineering personnel have been permanently located in remodeled areas since the project went into construction last April. A thousand persons are in new modern quarters in the four completed zones in Bldg. 5 and 500 in the two finished sections of Bldg. 51.

Relocation of the over 4,000 engineers involved in the program has been complicated by the increase in personnel since last spring, with over 500 added to the department.

Everyone working in the buildings has been moved two, and in some cases three times before being assigned to permanent locations.

Modernizing of the two buildings is due to be completed some time in June, two or three weeks behind the originally-scheduled

(Continued on Page 2)

Astro Gets Nod to Build 'Upper Stage' For Atlas

Many Convair Astronautics men and women are slated to get "into the act" in developing and building an "upper stage" for a modified Atlas ICBM under a contract announced for the first time last week.

The contract, amounting to almost $7 million in the first year, was awarded to Astronautics by the Air Force's Air Research and Development Command under authorization by the Advanced Research Projects Agency.

Astronautics will be systems manager for the project with full responsibility for design, construction and test of the vehicle and all its systems except the engine. The upper stage engine will be developed by Pratt and Whitney Aircraft.

Roy W. Johnson, ARPA director, has revealed this high energy, liquid-fueled upper stage vehicle utilizing an Atlas-type booster can put into orbit a satellite weighing several thousand pounds.

(Continued on Page 2)

Film, Music, Talks Scheduled For Astro

Two informative talks, an unusual film and stereophonic music is included in planning for the "Ladies' Night" meeting of the Astronautics Management Club tomorrow night (Jan 22) at El Cortez Hotel.

J. R. Dempsey, Astro manager, and R. F. Smith, chief of educational services, will speak.

Social hour will begin at 6:30 p.m. with dinner at 7:30 p.m.

Astro Gets Nod to Build 'Upper Stage' For Atlas

(Continued from Page 1)

In planning the project, J. R. Dempsey, Astro manager, has named Krafft A. Ehricke as project director. Deane Davis is the project engineer. Both Ehricke and Davis are veteran members of the Atlas development team.



Krafft Ehricke

While some departments have established specific project offices to handle work associated with the project, others are channeling assignments through their functions in routine fashion. This includes everything from preliminary design in engineering right down the line to fabrication, subassembly and assembly operations.

As with most defense projects, Astronautics is striving to hold actual costs to the lowest possible point. Toward this end, much experience gained in development of the Atlas and its components is being employed through design, component fabrication and assembly, Davis pointed out.

"Noteworthy is the fact this project was conceived so that no basic changes are needed in the Atlas ICBM," Davis said. "Only certain alterations of the nose will be required to accommodate the upper stage."

Because of this factor, Astro will be able to utilize most of the existing equipment and facilities used in Atlas production. For instance, tooling fixtures, for the most part, can be modified for work on the upper stage project, then reverted to normal Atlas production use. And much of the checkout, ground support and other equipment necessary for this project can be drawn from Atlas use.

"When we enter the test periods, practically every test item can be utilized with modifications for this new project," Davis said.

Due to the great interchangeable factor, most departments and functions will be able to assign employees to the project with a minimum of extra training, an important cost reduction item.

Although Pratt and Whitney will have representation at the Astro plant for coordination, no specific project office is contemplated at this time. Astronautics, on the other hand, will set up an office at Pratt and Whitney.

Rehabilitation Work Continues

(Continued from Page 1)

date of May. Slippage of construction schedules has been due mostly to material shortages and delivery delays, say industrial engineers in charge.

The exterior of Bldg. 5 will be finished by the end of February.

Permanent heating throughout the two buildings will be installed by March 15 and air cooling equipment will be ready for use by May. All areas now are being heated with temporary equipment and ventilation was installed Dec. 24.

* * *

Current moves will see personnel and equipment of the blueprint reproduction group permanently located this weekend in their former location on the second floor of Bldg. 5.

A reshuffling of over 100 engineering people in structures, wing, tail, and body groups on the third floor of Bldg. 51 next week (Jan. 30) will clear a portion of Zone 10 for construction work.

Medical Deduction Figures Listed for Income Tax Returns

Convair employees of San Diego and Astronautics Divisions or General Office who intend to itemize their medical deductions on their 1958 tax returns may deduct dependent insurance for the period it was paid.

A deduction of $2.25 per week may be taken for the period Jan. 1 through July 20; and $2.52 from July 21 through Dec. 31, 1958. The deduction applies only to those employees who carried dependent insurance.

The deduction for all employees who are members of a bargaining unit which did not accept major medical expense benefits for dependents remains at $2.25 per week for the entire year.

Besides dependent insurance deductions, employees also may deduct 15.5 per cent of the disability insurance premium, which was the amount applied toward hospitalization insurance.

For example, any person who earned $3,600 or more during the year paid $36 disability insurance, of which he may deduct 15.5 per cent, or $5.58, as medical expense. Anyone earning $2,000 during the year paid $20 disability insurance and, therefore, could deduct $3.10.

Anti-Missile Work Approved

(Continued from Page 1)

tical engineering.

Before coming to Convair he had been in charge of engineering sales as Wadell Aircraft Industries, Inc., Garwood, N. J. He had also served in the U. S. Navy Bureau of Aeronautics in Washington, D. C., and at Burbank, Calif. From 1947 to 1951 he was civilian research head in the Office of Naval Research, USN, at Washington, D. C.

The contracts are a new responsibility under ARPA's one-hundred million-dollar 1958-59 program to develop new ideas and new techniques that may lead toward the evolution of advanced area defense systems against ballistic missiles.

It's Time to Apply For Scholarship

(Continued from Page 1)

explaining the program have been distributed to high schools in the area. They are available within the plant at engineering educational services office, Bldg. 5, Col. 5-2-E; Plant 1 educational services, Bldg. 14, second floor; Plant 2 educational services, Bldg. 2, mezz., and Astro educational services.

Forms with transcripts of grades must be turned in by Feb. 27.

Applicants will be notified by March 16 of their eligibility and time and place of personal interviews. Winners will be announced as usual about April 1.



APPRECIATION—Scout David Henry visited Convair President J. V. Naish recently to present him with "Living Gift" certificate in appreciation of Convair's contribution toward Mataguay Boy Scout Camp development.

Astro Updates Phone Book

A new Astronautics telephone directory, first official issue since activation of the new plant, was expected to go into the mails at all Astro functions this week.

Prepared by the office services section of industrial engineering, the new directory contains approximately 4,000 listings.

It consists of five major sections, each containing specific information to assist the telephone user. For instance, a service section contains emergency numbers, frequently called numbers and information on dialing Astro's many off-site facilities. There is also a management section listing top men in each department.

Distribution of the directory will be made through normal mail facilities. A functional (yellow pages) section is also in the works and should be ready in about 60 days. On order are binders for the directory. They will be made available in the near future through stationery stores.

CONVAIR TO STUDY SUB-ZERO COOLANTS UNDER AF CONTRACT

Convair San Diego has received a $132,028 contract from the Air Force for a year's investigation into the use of sub-zero coolants in machining.

The program will include survey of different materials and coolants, evaluation, and simulated production to be done for the most part at Plant 2.

Plans call for experiments with seven different types or combinations of coolants at temperatures down to minus 150 degrees F. Effects of their use on different kinds of machines will also be under study.

Manufacturing development, headed by F. A. Monahan, is supervising the investigation with C. G. Farnsworth, project director.

State College Staff To Hold Interviews

Three representatives of San Diego State College will be at Convair Astronautics Feb. 2 and 3 to interview prospective students for the spring semester.

They will talk with those interested in earning bachelor or master of science degrees in business administration as well as those interested in the certificate program in industrial management.

Interviewers will be Simon Reznikoff, Louis Shuster and Glenn Hodge.

Those interested are asked to call either Jack Block or Alyce Martin of educational services, ext. 1471, for appointments. Appointments will be taken at 15-minute intervals starting at 8:30 a.m. each day.

Schriever Gives Astro 'Well Done' For Atlas

(The following letter, dated Jan. 13, 1959, was addressed to J. R. Dempsey, manager of Convair's Astronautics Division.)

Dear Mr. Dempsey,

It is with a deep sense of gratification that I take this opportunity to express to you and your entire organization my appreciation for the splendid job you have done during the past year.

The culmination of the year's effort is, of course, exemplified by the spectacular success of Project Score, to which your organization contributed so materially. The detailed engineering and system integration task accomplished by Convair Astronautics within the severe security restrictions that were imposed, reflect great credit upon the entire organization and particularly upon those individuals who were directly charged with the responsibility for the project. To me, however, this represents the outward manifestation of a whole series of equally important milestones successfully passed in our mutual effort to provide the country with an ICBM capability at the earliest possible time. Although these latter events did not receive the public acclaim given to Project Score, they were perhaps even more significant to our basic mission.

I know that there are still many difficult problems ahead of us in 1959, but if they are attacked with the same vigor, enthusiasm and "know-how" that you and your people have so freely given during 1958, I am confident that these problems will be solved and our schedules will be met.

Sincerely,

B. A. Schriever, Major General, USAF,
Commander, Ballistic Missile Division.

More Key Positions Filled In Product Support Dept.

Key supervisory positions in the new product support department support center (Dept. 340) were filled this month at Astronautics in appointments made by E. A. Reynolds, Astro's product support manager.

They include: W. W. Pierce, support center manager; K. R. Aiken, acting chief of support supply; L. I. Medlock, chief of support quality control; I. B. Jenkins, chief of support manufacturing control; and J. M. Rogers, superintendent, support center.



W. W. Pierce

Pierce, director of all support center operations, has been associated with the aircraft industry since 1927. He has held top positions with airlines and airline maintenance firms both in this country and overseas. Pierce first worked for Consolidated Vultee Aircraft from 1939 until 1943, rising to the job of chief inspector at Vultee Field. He came back to Convair in 1950 at Fort Worth and served as superintendent of both fuselage final assembly and development. He transferred to Astro in 1957 and served in Florida before joining product support as an assistant to Reynolds early last year.

Aiken is a former Convair employee (1937-48) who rose to be an assistant superintendent. He moved to Rohr Aircraft in 1948. He advanced to purchasing agent there and returned to Astro in August, 1958, as a product support staff assistant. He is a native of Troy, N. Y. who attended schools in Detroit and Los Angeles.

Medlock is a long-time Convair man whose service dates back to 1941 when he joined Convair as a student inspector. He moved up to inspector, leadman, assistant supervisor and supervisor at Convair SD before transferring to Astro as a general supervisor in 1956. He came to product support in August, 1958.

Jenkins first joined Convair in 1941 as a timekeeper. He was a junior accounting clerk when he left for a four-year Army tour of duty. In 1952 he returned to Convair in industrial engineering and moved into material operations that same year. One year later he switched to manufacturing control, rising to general supervisor. He joined Astro in 1958 in the same capacity.

Rogers came to Convair in 1940 as an electrician's helper. He rose quickly to general foreman during the war, then became a superintendent. He left the company following the war, returning in 1947 and again advancing to general foreman before moving to Astro in 1954 as final assembly general foreman. He also worked in missile checkout before shifting to product support.

Experimental Winner of Annual Safety-Housekeeping Contest

Experimental (Dept. 31) emerged winner of the annual safety and housekeeping contest at Convair San Diego after a neck-to-neck race with manufacturing control, Plant 1 (Dept. 192).

At the end of December, experimental stood two points ahead of the runner-up, said M. C. Val Dez, SD chief safety engineer. Manufacturing control was last year's winner of the annual award with a score of 20 out of a possible 24 points.

During the year, Dept. 31 with 1,612 employees had garnered 15 monthly awards, seven for good housekeeping and eight for safety, while manufacturing control had one housekeeping and 12 safety awards for a total of 13. In third place was 880 major mate, final assembly, and plastics with a score of 11.

The two leading departments stood tied in September with 880 major mate trailing by one point.

One point is given each month to winners in safety and housekeeping contests, making a possible perfect score of 24 points for the year.

Departments are judged each month in safety contests on number of serious doctor cases per number of manhours worked. Monthly housekeeping contests check departments on cleanliness and orderliness, material handling, fire, and safety inspection determining the percentage of violation per employee.

Winner of the contest for the year will receive an award from Division Manager B. F. Coggan at the annual safety and housekeeping trophy dinner which will be held some time in the spring, said Val Dez.

Electronics Winner Of Yearly Contest

Dept. 772 (electronics) at Convair Astronautics came through as top function in the annual safety-housekeeping records by winning first in December totals.

Dept. 772 won five housekeeping and 11 safety firsts for the year, slightly ahead of Dept. 214 (traffic and stores) with five and seven.

★ Convairiety ★

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SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 69C, mezz., ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; Bobbie Sue Marr, Horace A. Baker Jr.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Numerical Control Committee Holds Conference at Plant 2

Representatives from all Convair divisions and Stromberg-Carlson gathered at San Diego Jan. 7 for the second General Dynamics Corporation interdivision numerical control committee meeting.

Fifteen men from Convair San Diego, Fort Worth, Pomona, and Astronautics, and Stromberg-Carlson, all active in numerical control and computing operations, joined in topics of mutual interest. J. H. Famme, Plant 2 works manager at SD, chairmanned discussions dealing with problems of integration and operation of numerically-controlled equipment.

Membership of the committee, which met for the first time last fall, is: Famme, M. C. Copold, H. G. Cooper, and E. J. Penner of SD; J. B. Rankin of Fort Worth; R. Morris, Pomona; C. B. Young, Astronautics; and Jack Rosenberg of the E.C.S. Division of Stromberg-Carlson at Los Angeles.

Next of the meetings, which will be held at regular intervals, is scheduled for May at Fort Worth.

TOOL ENGINEERS CONFER JAN. 29-30

Chief tool engineers of all Convair divisions will meet at Convair San Diego Plant 1 to discuss subjects of mutual interest on Jan. 29-30.

R. W. Peters, chief tool engineer of SD Plant 1, sponsor of the meeting, said that discussions will deal with general tooling topics, exchange of tooling ideas, and ways and means of cost reduction.

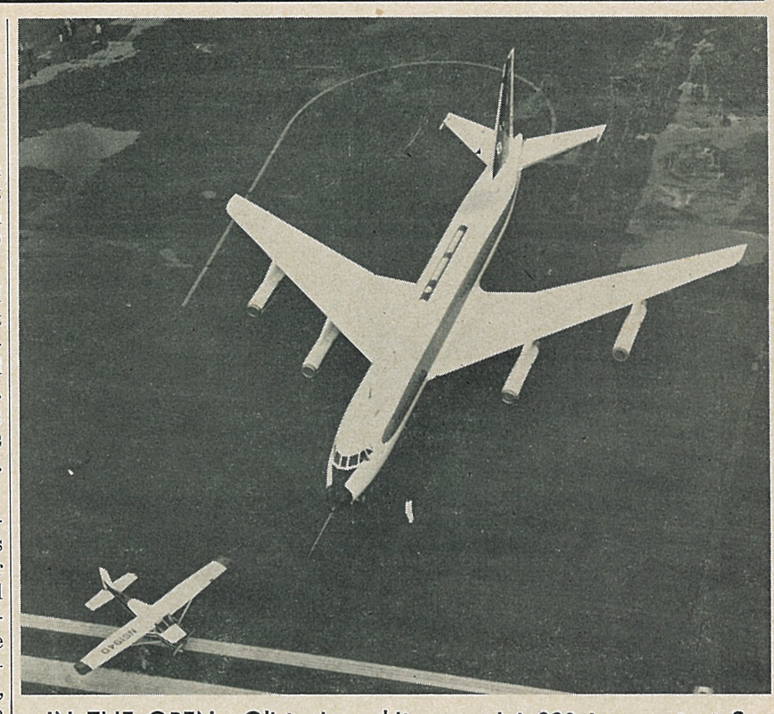
Attending will be W. P. Woods, SD Plant 2; A. T. Seemann of Pomona; L. G. Granstedt of Astronautics; and R. A. Fuhrer from Fort Worth. Meetings are held regularly every four months.

SD Men Attend 880 Training

Nine Convair San Diego men are scheduled to attend current classes pertaining to operation and equipment of the Convair 880 jet transport.

At a one-week training school of Kollsman Instrument Co. at Elmhurst, N. Y., to become familiar with the Kollsman integrated flight system (KIFIS) are E. R. Buckman, field service engineer; C. L. Johnson and L. W. Hughes of production flight; and R. R. Sharp of service publications.

Five production flight personnel will go to TWA headquarters in Kansas City, Mo., to monitor the Boeing 707 school. They will study teaching methods and material presented there as a guide to the coming 880 customer training courses. Besides Johnson, other Dept. 12 men auditing the classes will be L. J. Rice, L. M. Norton, C. J. Falkenthal, and J. B. Van Houten.



IN THE OPEN—Glistening white, new jet 880 transport at San Diego dwarfs private plane on Lindbergh Field at San Diego. No. 1 ship was taxi testing this week and will fly before month's end.



CONFERENCE—All Convair divisions were represented at numerical control meeting held at San Diego recently. Left to right (sitting) are: E. A. Bates, SD; M. C. Copold, in charge of numerical control activities at SD; Hal Holmerud, Astro; J. H. Famme, SD Plant 2 works manager; J. B. Rankin, Fort Worth; C. B. Young, Astro; and E. J. Penner, SD. Standing are (left to right) John Tarbox, E.C.S. Division of Stromberg-Carlson, L.A.; W. J. Whitehill, Pomona; Ruck Byrne, Astro; A. P. Langlois, SD; Paul Lewis, Astro; O. W. Sweetland, SD; Ben Ferber, SD; and R. Morris, Pomona.

880 Cockpit Procedures Trainer Due to Arrive This Week at SD

Production flight department at Convair SD is preparing to welcome what promises to be the most important training aid for the Convair 880—the cockpit procedures trainer — due to arrive this week.

The quarter-million-dollar trainer, first of its type to be used for jet transport training, was to have left Cincinnati, Ohio, where it was built by Burton-Rodgers, Inc., on Jan. 17.

It will be shipped in three sections by truck to San Diego. Following its arrival, it will be reassembled under direction of a Burton-Rodgers representative and set up in a special room reserved for it in the 880 customer training section on the lower floor of Bldg. 4, Plant 1.

It will be put into operation about Feb. 1 to start the 100-hour test period which is necessary before final acceptance.

Preliminary acceptance and checking of operational performance to determine if the trainer conformed to specifications was accomplished by P. H. Selby, production flight training supervisor, and A. P. Wilson, senior pilot, before the trainer left Ohio.

Convair 880 pilots, both of production flight and engineering flight test, will be checked out on the procedures trainer, an exact replica of the 880 cockpit with full-scale controls reacting as in actual flight.

Esenwein Speaker For AF-Industry At Palm Springs

August C. Esenwein, Convair executive vice president and former Fort Worth Division manager, was among 16 speakers to address the 38th Air Force-Aircraft Industry Conference last week in Palm Springs, Calif.

Esenwein, like representatives from North American, Northrop and Boeing, spoke on "Airframe."

Other topics including "Engine," "Sub Systems," "Production Teamwork," "Development and Test Teamwork," and "In Service Support Teamwork" were discussed by Air Force and aircraft industry people.

Theme for the four-day conference was "Teamwork," and major speaker was Lt. Gen. Clarence S. Irvine, deputy chief of staff, Materiel, Headquarters USAF.

B-58 Power Plant 'Flies' at Altitude But Never Leaves Ground at FW Plant

They're flying "high and mighty" at ground level these days at Convair Fort Worth's jet engine test stand in the northwest corner of the reservation.

Test engineers have taken a regular J79 jet engine installed in a B-58 production inboard nacelle and are in the midst of checking it at various simulated altitudes and mach numbers.

Although the engine actually remains at static sea level, a simple adaptation permits creation of high altitude conditions up to 27,000 feet.

Testing on the present project got under way in December. According to C. L. Jackson, control engineer, the present test series is scheduled to be complete sometime in February. At that time the engineers will tackle another phase of the engine test program.

"Overall objective of the present test is to find a way to measure absolute thrust," Dave Smith, power plant design engineer, commented.

Test Engineer R. S. Carter said tests generally run about two to four hours.

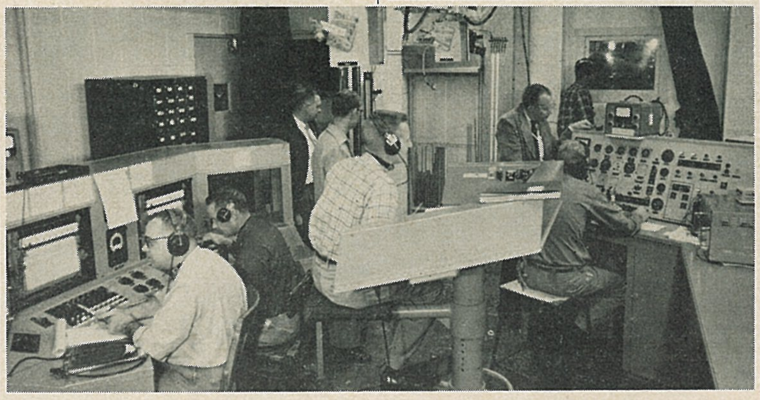
All engine conditions are carefully monitored in the test control room. Various pressures are reported through giant manometers located on both sides of the control room.

Because of the constant roar of the jet engine throughout the test period, the chief engineer and others directly connected with the project wear special intercom head sets.

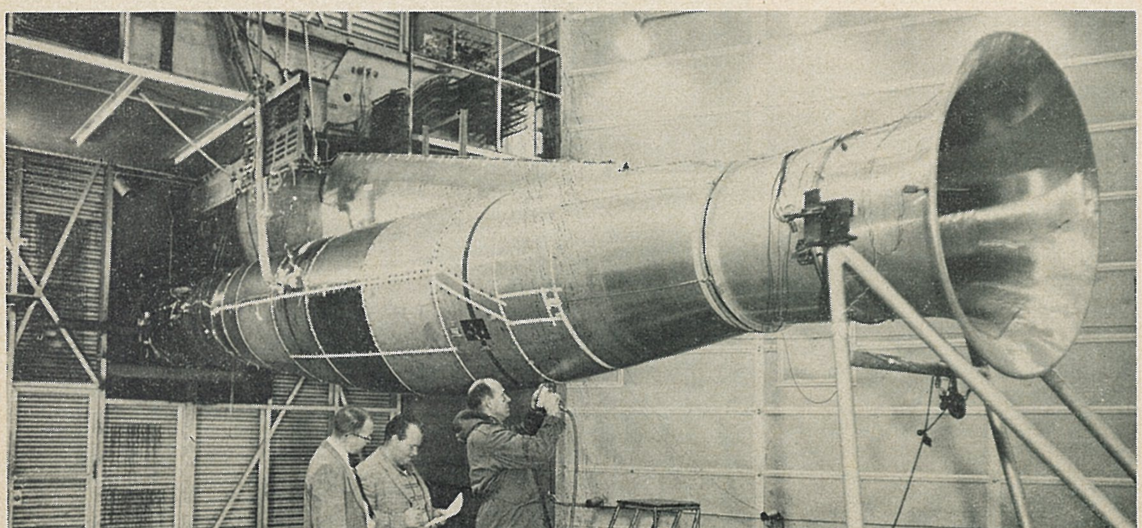
After the testing is over, data is gathered for study and analysis.

George Stewart is foreman in charge of the test area.

Numerous sea level static tests also can be conducted, such as power plant system evaluations, starting characteristics and engine performance. Tests are also made to determine the effect of jet engine exhaust gas temperatures and noise on airplane structure and equipment.



MASTER CONTROL—R. S. Carter, perched on the chief engineer's stool during testing, is aided in the control room by, left to right, Cliff Leath, Mike Lake, George Stewart, Dave Smith, C. L. Jackson, E. F. Burns and Clarence Borden. They carefully monitor condition of jet engine during run.



AFTERMATH—Following the test, left to right, C. L. Jackson, test engineer; R. G. Helton, control engineer, and E. R. Coombes check jet engine inside cell.

Baby Born on Xmas; So Was His Father!

Christmas Day's first baby in San Diego County and the first 1959 birth in Pomona were born to Convair parents.

Mr. and Mrs. Richard N. G. Steele (Astro Dept. 322-9) are the parents of Lawrence Noel, born 12 minutes after midnight, Dec. 25, at Grossmont Hospital. He weighed 6 lbs., 14 oz. The "N" in his father's name stands for Noel. He also was born on a Christmas Day!

Julie Ann Jarosh, born at 1:53 a.m., Jan. 1, at Pomona Valley Community Hospital is the daughter of Convair Pomona's Frank J. Jarosh (Dept. 51). She weighed 7 lbs., 6 oz.

AF Captain in Civilian Clothes Does as Told and Grabs a Broom

When the Air Force instructs its men to "fit," few question the reason even when it involves a broom in a clean-up detail.

Or so it would seem, judging by the experience of Capt. H. T. Ponder, maintenance officer for the 576th Strategic Missile Squadron, Vandenberg AFB, now in training at Convair Astronautics.

While the majority of the almost 200 Air Force officers and enlisted men now undergoing training with Astro's product support department wear their uniforms, there are occasions when they discard them in favor of civilian clothing. This occurs, normally, when small groups are engaged in "on-the-job" training programs. They have orders to "fit" within the surroundings.

Captain Ponder was engaged in such training at Astro's operation at the Air Force Missile Test Center in Florida. He had been working with a group of engineers and was awaiting the conclusion of tests to return to his job in Hangar "J" when a supervisor spotted him standing idle while a crew was "sweeping down." He was told to "grab a broom and lend a hand."

Captain Ponder did as he was told and soon had the dust flying.

Early this month E. A. Reynolds, Astro's manager of product support, and Col. J. J. Easton, the 576th commander, called Captain Ponder into a conference.

He was presented a special plaque naming him a charter member of the "Order of Crossed Brooms," in respect for an officer who became "one of the crew."



TRAVEL AIDES—Left to right, Marion Rogers, Carolyn Jones, and Dottie Luscomb in Convair SD's travel reservations office route an average of 30 air trips a day for company business in all parts of world.

Travel Reservations Office At SD Becomes 'Big Business'

Travel reservations office at Convair SD is settling down to normal after the rush of extra work during the recent airlines strike.

Throughout the three-week American Airlines strike, the three girls manning the office headed by Dorothy Luscomb worked late hours, missing lunch times and coffee breaks, to obtain air accommodations for Convair travelers.

(Since American Airlines is the only line connecting San Diego with Dallas, Texas, company travel between SD and Fort Worth Divisions had to be rerouted by northern lines or through Mexico.)

According to Mrs. Luscomb, who has seen the travel office grow from a $5,000 a month business ten years ago to a present average of $125,000 per month, at no time in her experience had it been so difficult to arrange air transportation.

Many Convair meetings and appointments had to be cancelled or rescheduled during the strike weeks. However, by the time service was resumed, Convair SD reservations office had obtained accommodations for all company people on the long waiting list, although in many instances it had taken a couple of weeks to make the necessary connections.

Two others, Marion Rogers and Carolyn Jones, have been added to the staff in recent months to help handle the growing operation. Convair spent more than $1,200,000 during 1958 on air travel for SD Division and General Office business with 6,700 reservations made through the SD office.

Since foreign travel has become a necessary part of Convair operations, trips are arranged through the travel office to every part of the world, said Mrs. Luscomb. Fifty wires a day are necessary and three phones are in almost constant use to set up trip reservations.

Convair receives no discount whatever on any air transportation. The plant office handles only reservations for company business. The office, located on the second floor of Bldg. 19, Plant 1, is a part of the office services section of material office.

Convair Son Leads Xmas F-102 Flight In Tree Formation

For Mrs. Edith Lister Wight of Dept. 6-56 at Convair SD Division the accompanying photograph of F-102s in Christmas formation has a special meaning.



Mrs. Wight

Her son, Lt. Col. Carrol H. Wight, commanding the 11th FIS at Duluth, Minn. is leading the formation.

Mrs. Wight is nearing her eighth anniversary at Convair. Her son is a Hoover High graduate and attended San Diego State before entering the service. He continued his education at Ohio State, obtaining a B.S. degree.



FLYING CHRISTMAS TREE—Squadron of F-102s, led by Lt. Col. Carrol H. Wight (son of Edith Lister Wight, Convair SD Dept. 6-56), streams skyward in Christmas-tree formation as 10-year-old Patrick Tighe waves greeting. Picture of 11th FIS at Duluth, Minn., was chosen as official holiday greeting by Air Force.

Traveler Rounds Globe During Xmas Vacation

John Watson of Convair Fort Worth gave himself a Christmas present that outdid "Around the World in 80 Days."

He made it around the world—29,000 miles—on his two-week vacation in 78 hours' flying time.

Part of it was by commercial jet, but his last leg turned out to be in a Convair 340 on a flight from Denver to Fort Worth.

Watson, who started on the first leg of his vacation trip from New York's Idlewild Airport, said that the trip was the realization of a life-long dream.

His trip went something like this: from New York City to London; from London to Rome; from Rome to Beirut; and from Beirut to Jerusalem.

He flew back to Beirut from Jerusalem after attending Christmas Eve Mass at the Church of Nativity in the Holy Land, then boarded a plane for India and New Delhi.

After the stopover in New Delhi, he headed for Calcutta, Bangkok, Manila, and Tokyo.

"I didn't meet an American tourist throughout the entire trip," Watson said. "Guess most Americans were staying at home for the Christmas holidays."

Watson previously has made vacation trips to countries in South America, the Caribbean and the South Seas.



SCORPION II—Dragster Bobby Langley of Convair Fort Worth's Dept. 81 pauses before take off in his $2,500 Scorpion II drag racer. Langley holds Texas record.

Fort Worth Tool and Die Maker Holds Texas Drag Race Record

Convair Fort Worth's Bobby Langley of Dept. 81 thinks no more of driving 169.49 mph from standstill in 9.13 seconds than he does driving a conservative 30 mph on a Sunday afternoon sight-seeing trip.

Langley, who holds the Texas drag race record, has raced from coast to coast and recently returned from Bakersfield and Riverside, Calif., where he took top honors among dragsters from all over the United States.

The 27-year-old tool and die maker, who has been in the drag game since he was 20, races a specially built dragster called Scorpion II. It took Langley three months and about $2,500 to build.

Langley and his Scorpion II have been written up in leading racing magazines including "Hot Rod" and "Speed Mechanics," and they have also been pictured in "Life."

"Drag racing is an acceleration test of one-quarter mile straight-away from a standstill. It falls roughly into five classes: stock car, modified, coupe and sedan, roadster, and dragster," Langley explained.

He says that his dragster idles at 3,000 rev. per minute, which is equivalent to something like 85 to 90 mph. He says there is no jar on the take off and that it's like riding a roller coaster—only more so.

There is no blast on the face at acceleration because of protective goggles and helmet.

Langley's Scorpion II doesn't get the mileage of today's "economy" cars. In fact, it takes about one gallon of pure methane for every quarter mile! The high compression engine boasts eight carburetors.

The Langleys can no longer eat in their dining room because of the 106 trophies scattered over the table and furniture!

SD Man, Associate, to Launch $15,000, 34-ft., Racing Yacht

When a $15,000, 34-foot, ocean-going sloop splashes into the Pacific late this year for the first time it will be one of the largest boats ever launched in the San Diego area by do-it-yourselfers.

According to the builders, Convair SD plant engineer T. W. Driver, and Jim Bishop, husband of Edna T. Bishop in Dept. 188-3, it will be especially designed for ocean racing and cruising.

Driver envisions his boat-to-be as a miniature "ocean liner." There won't be a swimming pool, but the boat will include galley, cabin, berthing and other accommodations for six people.

"Right now, it doesn't look like much," Driver said. "But considerable energy and time have gone into the hull alone."

After "test-driving" a boat similar to the kind he wanted in Portland, Ore., Driver had one of the 6,500-lb. hulls trucked to San Diego where he and his partner started work on it.

The weight in the hull is for the most part made up of approximately 4,500-lbs. of concrete and iron, dumped in the "stressed skin" fiber glass shell as ballast. The finished boat will tip the scales upwards of 12,000 lbs.

"We are putting in the framework for the deck and bulkheads now," Driver said. "The cabin will be able to stand anyone under 6-ft., 5-in., without scraping the overhead."

Last phase of construction period will be stepping of mast and bending main sail and jib.

"That'll be a great day," Driver said. "Although it will take a year of work and about half of the $15,000 a similar boat would cost new, it will be well worth the effort."

Heart Association Gets Convair Gift

A $10,000 gift from the Convair SD Con-Trib-Club, first installment of which was paid in 1957, has helped sponsor a new community service in San Diego—the Heart Association's "Work Classification Unit."

Function of this group, located at the Donald N. Sharp Memorial Hospital, is to place back on the job employees of San Diego County business and industry who have recovered from heart disorders.

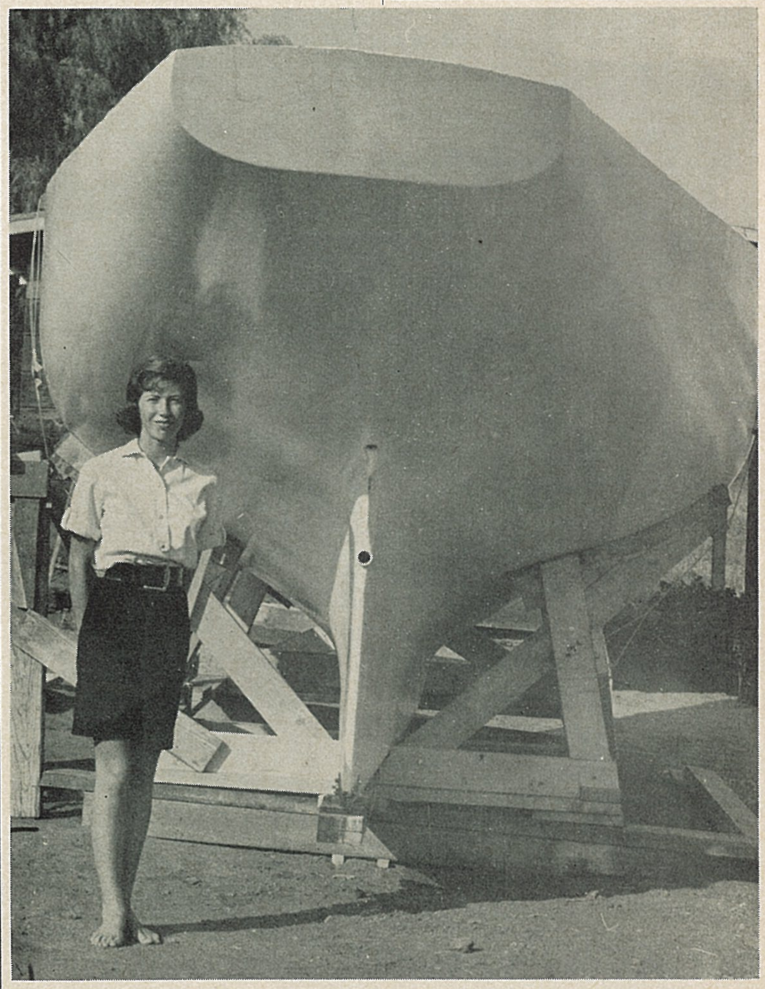
A team consisting of a social worker, examining physican, vocational counselor and psychologist work together to determine amount of work the recovered patient can perform and which job fits his new physical capacity.

Ice Cream Soothes Four Sore Throats

All four youngsters of Mr. (Convair SD, Dept. 6) and Mrs. Melvin Osborn ended up in the hospital one day last week for the same operation.

Andrea, 14, Julie, 10, Michael, 8, and Freddy, 7, were given plenty of ice cream after the ordeal, removal of tonsils.

Their stay in the hospital was extended to two days (instead of the usual one day) so Mrs. Osborn could rest up before taking care of all her "wounded warriors."



IN THE WORKS—Nancy Driver, 16, daughter of Tom Driver, Convair SD plant engineer, stands next to huge hull of sailing sloop scheduled for launching late this year. Over 4,500 lbs. of concrete and iron have been dumped into the fiber glass shell as ballast.

Your Social Security Benefits Explained in Simple, Readable Form

Increased Social Security benefits went into effect Jan. 1 as a result of 1958 amendments to the Federal Insurance Contribution Act.

At the same time, tax rates increased. The F.I.C.A. tax rate is now 2½ per cent of the first $4,800 of gross wages. Previously it was 2¼ per cent of the first $4,200.

The rate will increase again in 1960 and for every three years thereafter until 1969 when the rate will have risen to 4½ per cent.

Both Convair and its employees are affected, for whatever sum the employee pays, Convair matches it.

For example, if you made $4,200 in 1958 you paid $94.50 Social Security tax and Convair matched it. If you make $4,800 in 1959 you will pay $120. In 1969 an employee making $4,800 will pay $216 Social Security tax.

Increased tax revenue will provide increased benefits of about 7 per cent.

Some familiarity with how Social Security operates is important, for in some cases failure to apply for benefits will cause you to lose money to which you are entitled.

In general, Social Security benefits the individual and family in three cases: retirement, disability and death.

* * *

When You Retire

Workers retiring at age 65 or over can collect payments ranging upward from $33 a month. (See table). Women workers may retire at age 62 with benefits 20 per cent less than if they continue to work until 65.

Once a worker has retired, the dependent wife or husband upon reaching age 65 may apply for a monthly income equal to 50 per cent of the retired worker's benefit. A dependent wife can elect to receive benefits at age 62, but her payment is then reduced to 25 per cent of the husband's benefit.

Example: Mr. A retires at 65 and receives $100 a month. Mrs. A reaches 62 and applies for $25 a month benefit. Or, Mrs. A can wait until she is 65 and apply for $50 a month. Or, she can apply at any time between age 62 and 65, but the amount she will receive will vary, depending upon how long she has waited to apply.

Dependent children (under 18 or disabled) and a wife (regardless of age, if caring for an eligible child) also may apply for payments half of that being paid the retired worker.

Total monthly payments to a family cannot exceed $254.

* * *

Life Insurance

If you die the following dependents may receive insurance benefits regardless of your age at the time of death:

1. Widow 62 or over.

2. Widow or dependent divorced wife (regardless of age) if caring for eligible child.

3. Dependent widower 65 or over.

4. Dependent parent (mother 62 or father 65).

(Benefits received by each of the above four is three-fourths of the amount to which the worker would have been entitled at age 65.)

5. Dependent child (under 18 or disabled).

Children receive one-half plus another quarter divided among all the children. These payments are subject to the family maximum provision (not to exceed $254).

In addition, upon death, a lump sum payment (not exceeding $255) may be paid to your widow or widower or to person paying for burial.

* * *

If Disabled

If you are disabled and unable to perform any substantial, gainful work you will qualify for monthly cash benefits at age 50 or over.

If you haven't reached 50, you will be able to have your social security record "frozen." This means that the period of low or no earnings need not be counted in figuring your average earnings or in figuring amount of work necessary to be eligible for payments.

Payments for disability at age 50 are the same as those you would receive if you retired at 65. Dependents eligible for benefits if the worker receives disability payments are the same as those for dependents of retirees.

* * *

How to Figure Benefits

A table carried separately on this page will be helpful in arriving at the monthly retirement benefit which you can expect.

You must first find your "starting date." If you have worked under Social Security for at least a year and a half after 1950 you may use Jan. 1, 1951, as a starting date to figure average monthly earnings. Or, if going all the way back to Jan. 1, 1937, will give you higher benefits, you may use that as your starting date. Most people retiring now or in the future will get higher benefits using the starting date of Jan. 1, 1951.

If you have not worked under Social Security for at least a year and a half after 1950 but HAD worked before 1951, you must use Jan. 1, 1937.

List your earnings in work covered by Social Security for each year beginning with your starting date. DO NOT include more than $3,000 for any year before 1951, or more than $3,600 for any year from 1951 through 1954, or more than $4,200 for any year from Jan. 1, 1955 to Jan. 1, 1959. (These maximums are the levels on which Social Security taxes were based in those years). Beginning with 1959 include earnings up to $4,800.

In order for you to establish the highest average earnings possible, it is permitted for you to drop out and not consider up to any five years in this period. Naturally, you would drop out the years of lowest earnings and use the remaining years on which to base your average monthly earnings.

Example: suppose an individual has a starting date of Jan. 1, 1951 and has earned the maximum since then. His average income would be computed:

1951	$3,600
1952	3,600
1953	3,600
1954	3,600
1955	4,200
1956	4,200
1957	4,200
1958	4,200

Eliminating the years 1951-1954 as "low years," the average yearly income would be $4,200 or $350 per month.

* * *

There Are Four Times for Action

It is especially important to consult the Social Security office for the following reasons:

1. When you reach retirement age (62 for women, 65 for men). If total earnings are not over $2,080 a year or if there is even one month of year when no work is performed some old age insurance payments may be due.

2. When you are 72. Benefits may be payable even though full time job is held.

3. If worker in your family dies. Survivors insurance may be payable.

4. If you are disabled before 65. Earnings account may be "frozen" (see If Disabled) to protect benefit right. If between 50 and 65 disability insurance benefits may be due.

After Retirement

After retirement there are limitations upon how much you can earn by working.

If you are between ages 65 and 72:

You may receive full payment of benefits due if you earn no more than $1,200 in a year.

You may receive partial payment if you earn no more than $2,080 in a year but . . .

You may receive full payment for months in which you earned no more than $100 from wages or from rendering services in a business of your own no matter how high the annual earnings.

A point to remember: a person who earns money after he retires may have his benefit re-figured to take this pay into account. If it raises his overall earnings average it can mean a higher benefit.

If you are over age 72, you can earn as much as you like and still receive all your Social Security benefits.

* * *

When Benefits Stop

Payments of monthly benefits will stop for a number of reasons.

1. When a dependent or survivor marries. Exception: If a widow remarries and second husband dies within a year after marriage and she has no child by her second husband, she regains rights to benefits payable to her at age 62 under first husband's Social Security account.

2. If wife or dependent husband is divorced.

3. If dependent child marries.

4. Payments stop if a child entitled to benefits reaches 18, unless he is disabled.

5. If any person receiving benefits dies.

When Insured

To be eligible for monthly payments for yourself and family or for your survivors in case of death you must have been in work covered by Social Security for a certain length of time.

This is determined using "calendar quarters" as a key. A calendar quarter is a three-month period.

When does a worker become eligible for Social Security death benefits? The minimum require ment is that he has earned six quarters in the three years prior to his death.

A worker who has accumulated 40 quarters (equal to 10 years of work) is fully insured for the rest of his life, regardless of whether he continues to work or not.

In the case of Convair, determining the "calendar quarters" earned is a fairly simple matter. However, in figuring credit for broken employment elsewhere, farm work or periods when self-employed, you are advised to seek counsel of the Social Security Administration.

* * *

Filing a Claim

Before any benefits can be paid a claim must be filed with the Social Security Administration. It is advisable to go in person to your local office, or if you are unable to do this, contact the office by telephone.

How to Figure Social Security

If Your Average Monthly Wage After 1950 Is*	If You Retire at 65 or Are Disabled at 50, You Receive	For Retired Couple, both 65, You Receive	For Working Women Retiring at 62, You Receive (20% Reduction)	Your Widow, Widower, Child or Parent Receives	Your Widow and Two Children Receive	Payment to Your Family Can't Exceed
**$400.00	$127.00	$190.50	$101.60	$ 95.30	$254.00	$254.00
390.00	125.00	187.50	100.00	93.80	250.00	254.00
380.00	123.00	184.50	98.40	92.30	246.00	254.00
370.00	120.00	180.00	96.00	90.00	240.00	254.00
360.00	118.00	177.00	94.40	88.50	236.00	254.00
350.00	116.00	174.00	92.80	87.00	232.00	254.00
300.00	105.00	157.50	84.00	78.80	210.00	240.00
250.00	95.00	142.50	76.00	71.30	190.00	202.40
150.00	73.00	109.50	58.40	54.80	120.00	120.00
50.00	33.00	49.50	26.40	33.00	53.00	53.00

*After dropping out as many as five years of lowest or no earnings.

**A $400.00 monthly average will generally not be possible for anyone who has reached the age of 21 before 1953. For example, if you retire in 1960 with maximum earnings, your monthly average would be $370. This is because of the lower maximums on which you were taxed in earlier years of the Social Security programs. See "How to Figure Benefits" above.

Employees Paid $5,945,000 F.I.C.A. Taxes in '58 and So Did Convair

During the last six years Convair employees have paid approximately $25,877,000 in Federal Insurance Contribution Act taxes.

And during these six years Convair has paid a like amount, $25,877,000, in F.I.C.A. taxes for a total of $51,754,000, according to research conducted for Convairiety in the office of A. G. Rothlisberg, Convair assistant treasurer-taxes.

For 1958, Convair employees paid an estimated $5,945,000 (approximately $94.50 per employee) and, of course, Convair matched this sum in payments to the government.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., airframe and missile builders.

Electric Boat of Groton, Conn., submarine builders.

Stromberg-Carlson, of Rochester, N.Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N.J., electric motors, generators.

CHARACTRON Tube Used in New High-Speed Recorder For Navy

SAN DIEGO—Stromberg-Carlson-San Diego has installed an S-C 4010 High-Speed Microfilm Recorder at the Naval Proving Ground, Dahlgren, Va.

The system is capable of recording up to 15,000 characters or 10,000 graph plotting points per second. The S-C 4010 is to be used to print tabular data and to plot graphs computed by the Naval Ordnance Research Calculator. The NORC is a large high-speed general purpose digital computer. Uses include high-speed graph plotting of complex mathematical formulae used for computing problems of satellite trajectory, spatial navigation and hydrodynamics.

The Microfilm Recorder consists of a CHARACTRON shaped beam tube (7-inch screen), electronic controls and logic circuitry and an attached 35 mm Traid-Automax Camera for high-quality permanent photographic recording.

The NORC supplies all intelligence for the selection of alphabetical, numerical or graphical characters and their positioning on the screen of the CHARACTRON shaped beam tube. The characters are then projected from the tube face onto the 35 mm film and permanently recorded. Provision is made to advance the film under command of the computer.

Groton Plant Modernizing

GROTON, CONN.—A modernization program is under way at General Dynamics Corporation's Electric Boat Division here to equip the plant's north yard for construction of large nuclear powered submarines.

The renovation will be completed this summer at cost estimated to be in excess of $2 million.

When the modernization is completed, the keel for the first of a new class of ballistic missile (Polaris) submarines will be laid. The selection of General Dynamics to build that ship, thus far designated only as SSB(N) 608, was announced by the Navy on Dec. 31.

One small nuclear sub, the 2,175-ton, 260-foot killer sub Tullibee, is now being built in the north yard but all previous atomic construction at Electric Boat Division has been assigned to the plant's south yard.

Modernization work will in no way affect production schedules on the seven atomic submarines now in various stages of construction here.

Dynamics Will Aid Republic of Korea

SAN DIEGO—In a new program to promote "Atoms for Peace" in Asia, General Dynamics Corporation will assist the Republic of Korea in establishing a National Atomic Research Institute under provisions of the financial grant to Korea announced in Washington by the U.S. Atomic Energy Commission.

General Dynamics will send scientists and engineers of its General Atomic Division to Korea to serve as consultants in determining the requirements of the Institute, including design of the Institute's initial buildings.

The Korean Government, in turn, will send scientists, engineers and technicians to General Atomic Division's John Jay Hopkins Laboratory for Pure and Applied Science in San Diego.

Canadair Newspaper Becomes Tri-Lingual

MONTREAL — Canadair Ltd.'s company newspaper, the Canadair News, for years has published both English and French editions to accommodate readers, many of whom speak chiefly French.

Recently the News blossomed out in still another tongue, German! It was only temporary, however, to serve a number of German Air Corps personnel at Canadair for F-86 training!





SKI SKI CLUB CLUB—New Year's day proved to be as good a day as any for both Convair SD Snow and Water Ski Clubs to get in a few licks. "Frigid-idjits" cruised Mission Bay in water about temperature of "melting ice cubes," according to Commissioner Tom Mathews. Snow skiers journeyed to Big Bear where they took advantage of man-made snow on Rebel Ridge.

Badminton Play Starts Feb. 21

First full-scale badminton tourney of the year at Convair San Diego has been set for Feb. 21 and 22, Tom Richardson, commissioner, said.

Entries for the competition close Feb. 13. Three separate classes, A, B, and C, are planned. Mixed singles and doubles events will most likely be held.

Entries should be phoned to Tom Richardson, ext. 2780, Plant 1.

Convair Archer To Appear on TV

Vice president of the Archery Club at Convair San Diego, Roy Dill, who is also a former national archery champion, will demonstrate his talents as a bowman on Channel 6, 10-10:30 a.m., Jan. 23.

Class A winners of a shoot staged by the club this month were Bob English and Harry Ross. Bud Bence and Patricia Smith took Class B honors. Eddie MacDonald won the junior class.

Log Book Entries

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective Jan. 5:

Dept. 4-1, Material: To inventory control supervisor, I. R. Zaebst.

Dept. 6, Engineering: To chief of predesign-missiles, W. E. Strohmeyer. To research group engineer, M. M. Christensen, P. H. Taylor. To group engineer, K. A. Seely.

Dept. 15-5, Customer Service: To service engineering asst. supervisor, S. B. Stevens Jr.

Dept. 31, Experimental: To M/C foreman, J. P. Schreffler. To foreman, J. E. Turner. To M/C asst. foreman, G. R. Bollmann.

Dept. 66, High Speed Wind Tunnel: To asst. design group engineer, D. T. Ostenso.

Dept. 190-1, Manufacturing Development & Process Specifications: To technical services supervisor, C. V. Stromberg.

Dept. 192-5, Manufacturing Control: To M/C asst. supervisor, R. B. Bailey, R. A. Gadow.

Dept. 306, SAGE Integration-Lexington: To supervisor Convair SAGE, F. M. Garth.

Retirements

SAN DIEGO

ALM—C. V., Dept. 401. Seniority date Oct. 27, 1950, retirement effective Jan. 5, 1959.

HUNTER—W. M., Dept. 14-8. Seniority date Aug. 11, 1949, retirement effective Jan. 9, 1959.

O'BRIEN—G. C., Dept. 401. Seniority date March 14, 1951, retirement effective Jan. 10, 1959.

SCHICK—A. H., Dept. 31. Seniority date Oct. 20, 1952, retirement effective Jan. 5, 1959.

SNOW—B. A., Dept. 14-7. Seniority date Dec. 22, 1950, retirement effective Feb. 15, 1958.

Personals

SAN DIEGO

I wish to express sincere thanks to my many Convair friends for all the flowers and other expressions of sympathy sent on the occasion of the loss of my wife, Mrs. A. V. Perry.

Oscar Perry, Dept. 25-1

* * *

Mrs. Loyal S. Baker and her sons, Forbes and Vance, wish to express their heartfelt thanks for the many kind considerations shown them by Convair families during the recent illness and death of L. S. (Hap) Baker, Dept. 6-51.

Service Emblems

SAN DIEGO

Service emblems due during the period Jan. 16 through Jan. 31:

Twenty-year: Dept. 6-51, J. A. Smole.

Fifteen-year: Dept. 6-34, S. G. Roux; Dept. 117-0, F. E. Schenck; Dept. 192-7, Mamie M. Gideon; Dept. 266, F. C. Silverthorn; Dept. 271-0, J. F. McClure.

Ten-year: Dept. 1-51, T. P. Moran; Dept. 3-5, Guadalupe Ashook; Dept. 4-1, Dorothy A. Oakerson, L. H. Thoulion; Dept. 6-51, B. R. Hatcher; Dept. 14-4, Matilda M. Buckman; Dept. 15-5, R. E. Sommers.

Dept. 21-1, A. L. Burnett, R. W. Tate; Dept. 25-0, Doris H. Bennett; Dept. 31, H. L. Adams, N. L. Altizer, J. R. Estrada, J. V. Green, H. E. Leonard, E. J. McInvale, W. J. Young; Dept. 97-6, Birdielou S. Earley.

Dept. 139, Aurelio Enriquez; Dept. 149, Marylou M. Elverson; Dept. 192, Ethyl R. LaFleur; Dept. 218, Bernice D. Small; Dept. 232, Doris T. Flack; Dept. 267, E. G. Israel; Dept. 280, D. H. Marlar; Dept. 292, Isabelle M. Cole; Beulah W. Harralson, Kathleen S. Murphy, Leroy Sears; Dept. 403, A. C. Wright; Dept. 600-1, G. T. Grimes.

Births

SAN DIEGO

BARNETT—Daughter, Lori Renee, 5 lbs., 10½ oz., born Dec. 2 to Mr. and Mrs. Malcolm Barnett, Dept. 403.

HURTADO—Daughter, Rhonda M., 7 lbs., 2¼ oz., born Dec. 17 to Mr. and Mrs. Edward Hurtado, Dept. 31.

LAMB—Twins: Son, Duane Robert, 5 lbs., 3 oz.; daughter, Elaine Roberta, 4 lbs., 5½ oz., born Dec. 28 to Mr. and Mrs. James H. Lamb, Dept. 406-7.

LYONS—Son, John Philip, 6 lbs., 8 oz., born Oct. 4 to Mr. and Mrs. George W. Lyons II, Dept. 8-1.

VAN DER GINST—Daughter, Susan Yvonne, 7 lbs., 7 oz., born Dec. 26 to Mr. and Mrs. Ed E. Van Der Ginst, Dept. 6.

WILEY—Son, Mike, 7 lbs., 2 oz., born Dec. 23 to Mr. and Mrs. Alex Wiley, Dept. 406.

WILLIAMS—Daughter, Jeanne Elizabeth, 8 lbs., 13½ oz., born Jan. 7 to Mr. and Mrs. Gary Williams, Dept. 406-7.

Deaths

SAN DIEGO

BAKER—Loyal S., Dept. 6. Died Dec. 31. Survived by wife, Jeanne.

CAMACHO — Armando, Dept. 149. Killed in auto accident in Arizona while on vacation. Survived by mother, daughter.

FLANNAGAN—Harry B., Dept. 31. Died Jan. 7. Survived by wife, Margaret.

Stromberg-Carlson Employee Discount SD Dealers Listed

In future, only specially designated dealers will handle Stromberg-Carlson sales to Convair employees under the Employees' Purchase Plan, by which suitable discounts are allowed.

N. Berkowitz, in charge of the West coast for Stromberg-Carlson's high fidelity products, said the general procedure for purchasing radio and phonograph equipment remains the same, with employees obtaining a purchase agreement at employee services, once they know what item they wish to buy.

The discount applies strictly to the item itself and not to delivery or installation charges.

Dealers who will handle employee purchases in the San Diego area are:

Wilson's TV of La Mesa, consoles only.

High Fidelity House of San Diego, components only. (High Fidelity also has a Pasadena branch which can be patronized.)

Hamilton's Radio of La Jolla, consoles and components.

Ad Theme Chosen For SD Hoedown

"Come as Your Favorite Ad" is the theme chosen for the Jan. 24 square dance planned by the Convair SD Hoedowners at the American Legion Hall, Commissioner P. E. Liggett announced last week.

Van Van der Walker will call for the party night which starts at 8 p.m. On Jan. 31 the group will journey to the San Marcos Barn (five miles west of Escondido).

HOURS FOR FIBER GLASS BUYING SET

Fiber glass supplies can now be purchased at the Gillespie Field boat builders' facility every Saturday between 8 and 11:30 a.m. A new crew of 16-ft. boat builders started construction this month, setting a goal of one-per-week. Some openings are still available. Information can be obtained by calling Frank O'Connor, ext. 2415, Rose Canyon.

ONE FISHERMAN WINS IN DECEMBER

Only one winner was announced by the Convair SD Fishing Club for December. He was Max Guess (Dept. 192) who landed a 48-lb. white sea bass. Members met last night in the Conference Building, Balboa Park.

Chess Club to Set Policy at Meeting

A reorganizational and membership meeting of the Convair SD Chess Club will be held tonight (Jan. 21), 7:30 p.m., in the CRA Clubhouse.

All Convair SD employees and family members interested in chess are invited to attend. Main subjects of discussion will concern club play and tourneys, outside competitions and beginners' instruction.

A team or teams (depending on turnout) will be picked to represent Convair in outside competitions.

Pros to Address Golf Club Meeting

Two of the top golfers on the pro circuit, Billy Casper and Mike Souchak, will be guest speakers at a dinner meeting of the Convair Golf Club Jan. 30, 6:30 p.m., in the Lafayette Hotel, 2223 El Cajon Blvd.

All members, both regular and prospective, are invited to attend with wives or guests. Tickets for the event are priced at $3 each.

Ken Wulfemeyer, ext. 1705, and Frank Kelly, ext. 2141, are handling tickets at Plant 1. At Plant 2, tickets can be obtained by calling Jerry Swarts, ext. 456, Mort Smith, ext. 651 or Gerry Dix, ext. 631.

April Dates Set For Keg Tourney

April 18-19 and 25-26 are the dates set for the annual bowling championship tournament at Convair SD, Commissioner Jim Hayman announced last week.

Teams eligible to participate in the tourney include those competing in the many Convair leagues now rolling as well as "pick up" teams composed of Convair employees.

Starting in early February entry blanks will be available at alleys where Convair SD teams now bowl. Employee services, Plants 1 and 2, will also furnish the forms.

NEW TITLE CHOSEN FOR TRAINING SEC.

Title of training sections at Convair SD and Pomona has been changed, effective this month, to "educational services section" of industrial relations and security.

The title change is being made in all Convair divisions.

There will be no changes in organizational setup, personnel, or in scope of operation.

All-Star Golf Film To Be Shown Feb. 2

Golfing enthusiasts at Convair SD are invited to attend the special showing of an All-Star golf film Feb. 2 at the Astronautics facility.

The free film featuring Gene Littler and Lloyd Mangrum will be shown at 7:30 p.m. in the Bldg. 2 auditorium at the Kearny Mesa site.

Norm's Gym Offers Bargain Membership

Half-price memberships are open to Convair SD men and women at Norm's Gym, 3461 Ingraham St., Pacific Beach.

The discount is being offered to all employees and members of their families through arrangements with the Industrial Recreation Council, to which Convair belongs.

Discount tickets entitling holders to a three, six, or 12-month membership at half the regular price may be obtained at SD employee services, Plants 1 or 2.

For further information those interested may call the gym, BR-4-3344 for men; BR-4-1242 for women.

Mary Smith Installed Head of Delta Club

Mary Smith, Dept. 6-21, Convair SD, was seated as president of the Delta Toastmistress Club at an installation dinner Jan. 13.

Installed at the same time were Louise Klein (wife of Kurt Klein, Dept. 231), vice president; Virginia Reynolds, Astro Dept. 521-7, secretary; Geri Shestag, SD Dept. 91, treasurer. Adrienne Karel, Astro Dept. 579-5, continues as club representative.

Delta Club meets the second and fourth Tuesday of each month at 7:30 p.m. in the Embassy hotel. All Convair women (Astro or SD) interested in development of self-expression are welcome.

Rides, Horse Shows, Subject of Meeting

The 1959 calendar of events for the Convair SD Riding Club will be discussed at a meeting Jan. 28, 7 p.m. in the CRA Clubhouse, 3401 Pacific Hwy.

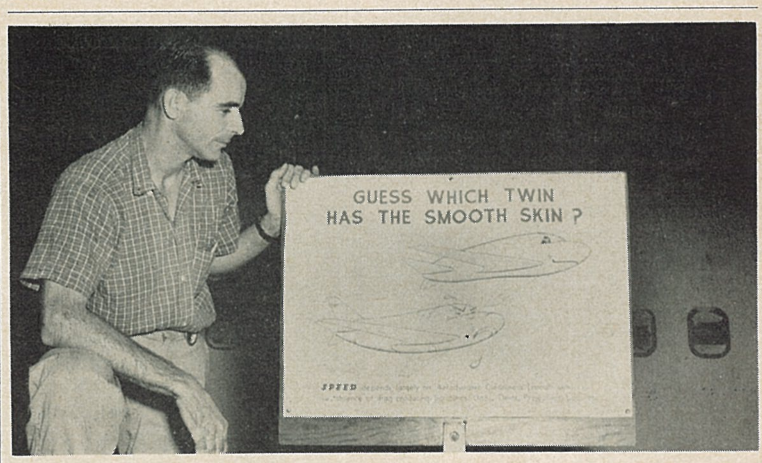
C. L. Pogorel, commissioner, urged both regular and prospective members to attend. Discussion will include '59 trail and breakfast rides and horse shows.

Membership cards will be distributed and refreshments served, Pogorel said.

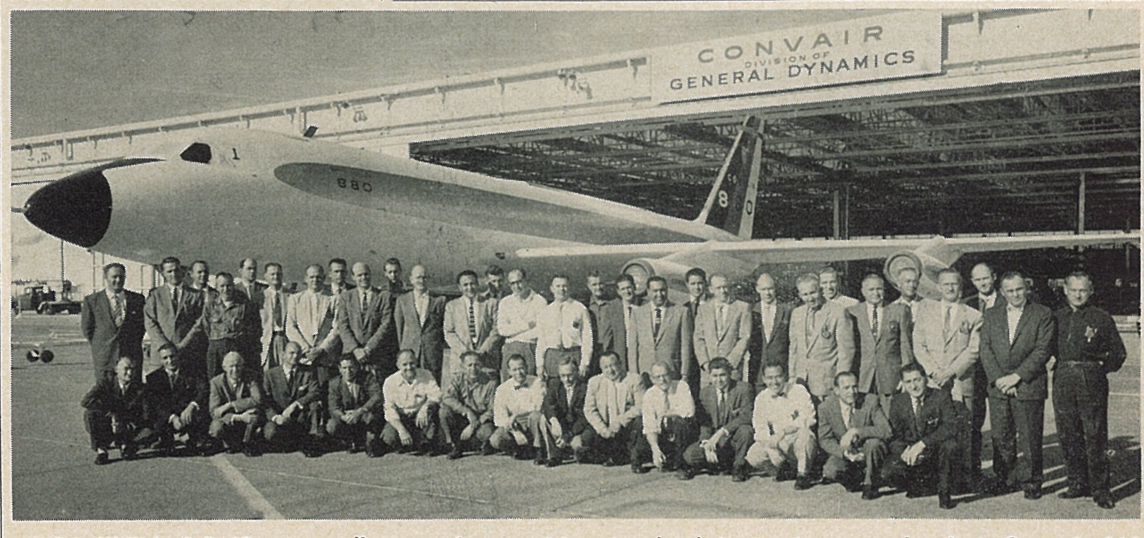
DIVERS PLAN PICNIC

A beach meeting and picnic for the Delta Divers at Convair San Diego has been set for Feb. 1, 1 p.m., at La Jolla Shores.

Commissioner Tom Richardson said entire families are welcome and that the club's 16-ft. boat will be available.



SMOOTH SKIN—Don Broome of Dept. 146, Convair SD, studies sign now placed on wings of all 880 jet transports on assembly line to remind workers of importance of unmarred surfaces.



JOB WELL DONE—A small part of supervision involved in turning out the first Convair 880 line up with plane No. 1 as it comes off the line. Shown are men in charge of final assembly, major mate, mockup, inspection, and field operations. Pictorial record of first planes started with first Convair-Liner 240.

CRA Sports & Recreation Convairiety

Five Classes of Ballroom Dancing Start This Month

Virtually every member of the family who wishes to learn how to dance or become more adept can do so by taking advantage of a new series of classes which will start this month at the Grace McGrath Dance Studio.

Special sessions will be held for adults (beginner and experienced), teen-agers, and toddlers (ages 4-7).

A new series of adult beginners' classes will start Jan. 26, 7:30 p.m. and another Jan. 27, 8:30 p.m. at the studio located at 1322 Fifth St.

On Friday, Jan. 23 at 7:30 p.m. a special class in Latin variations will start for experienced dancers. Those attending will have their choice of learning the rhumba, cha-cha, samba, and tango. Authentic patterns and steps will be taught in this "Latin workshop."

Teen-agers can get into the act Jan. 28 at 8 p.m. Depending on the turnout for the practice session, an hour of free dancing without coaching will possibly be held.

For the toddlers, tap dancing, ballet and acrobatic classes will be available every Saturday morning at 10:30. This time has been chosen so parents can go shopping while they are downtown.

Convair employees get special rates on all classes. Current fee is $3 a month.

For registration and information call the studio evenings and Saturdays, BE-4-8686.

DUNN WINS TOP DRIVING HONORS

Top sports car driver in San Diego because of his excellent showing in a variety of championship events is Bob Dunn of Dept. 6 at Convair SD.

Three other Convair SD drivers were ranked in the top ten according to statistics released by the San Diego Council of Sports Car Clubs.

Dunn, who won only one event during the year, placed high enough consistently to score 162 points. He was regular navigator of an MG-TD piloted by Dick Bauer (SD Dept. 6), who was ranked fourth in the standings.

Dick Elms, Dick Mobratten and Bob Woods placed fifth, ninth, and 11th respectively (all are in Dept. 6).

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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BALLROOM DANCING—New series of classes starting. For information call Grace McGrath Studio, 1322 Fifth Ave., BE-4-8686.

BOWLING—Entry blanks for SD Championship tourney available in early February at employee services, Plant 1 and Plant 2.

CHESS CLUB — Membership meeting tonight (Jan. 21), 7:30 p.m. in CRA Clubhouse.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse.

COIN CLUB—Film, "Battle of Tarawa," will be shown at Jan. 28 meeting, 7:30 p.m., Hearing Aid Society Bldg., 3843 Herbert St.

GOLF — Entries for Convair SD sweeps at Flying Hills open Jan. 26-Feb. 4. Call 1705, Plant 1, to register. Convair Golf Club meeting Jan. 30, 6:30 p.m., Lafayette Hotel, 2223 El Cajon Blvd.

MOVIES—Reduced-price movies each Friday night at Academy Theater, 3271 University Ave. Jan. 23—"Bernardine" and "King Creole." Jan. 30—"Night Passage" and "Another Time, Another Place." Admission: adults, 25c; children, 10c.

RADIO CLUB — Morse Code classes every Thursday, 6 p.m. at club headquarters on Harbor Drive. Next meeting tomorrow night (Jan. 22), 7:30 p.m.

RIDING CLUB—Meeting Jan. 28, 7 p.m., CRA Clubhouse.

SKI CLUB — Movie, "White Flight," with John Jay, narrator, Feb. 3, 8 p.m., Hoover High School auditorium, 4474 El Cajon Blvd.

SQUARE DANCING—Costume dance 8 p.m., Jan. 24, American Legion Hall, 4061 Fairmount Ave. Barn dance at San Marcos Barn, 8 p.m., Jan. 31.

Coin Clubbers Can Get Proof, Mint Sets Now

Proof sets for 1959 from the Philadelphia mint and uncirculated 1958 mint sets from the Treasury Department are now available, Convair SD Coin Club spokesman, Joe Miller, announced last week.

Cost of proof sets is $2.10 each, Miller said. They can be obtained in quantities of one, two, five, 10, 25, 50, or multiples of 100 sets only. Orders should be directed to Mrs. Rae V. Biester, Superintendent, U.S. Mint, 16th and Spring St., Philadelphia 30, Pa. Last year's proof sets also are available.

The '58 mint sets can be purchased until March 31 of this year. Miller said they are sold in sets only. Each contains two of the following coins (one from each of the mints now operating): half-dollar, quarter, dime, nickel and cent. Cost of one set is $4.43.

Checks should be drawn to Treasurer of the United States and mailed to Treasurer, U.S. Mint, Cash Division, Washington 25, D.C. No personal checks, unless certified, will be accepted. Money orders or bank cashiers' checks are preferred.

★ ★ ★

Next Convair SD Coin Club meeting will be held Jan. 28 in the Hearing Aid Society Bldg., 3842 Herbert St.

A film entitled the "Battle of Tarawa" will be shown. Miller said the movie was filmed under actual battle conditions and has not previously been shown to the general public. Plans for a pot-luck supper at the February meeting will be discussed.

Bender New Prexy Of SD Rockhounds

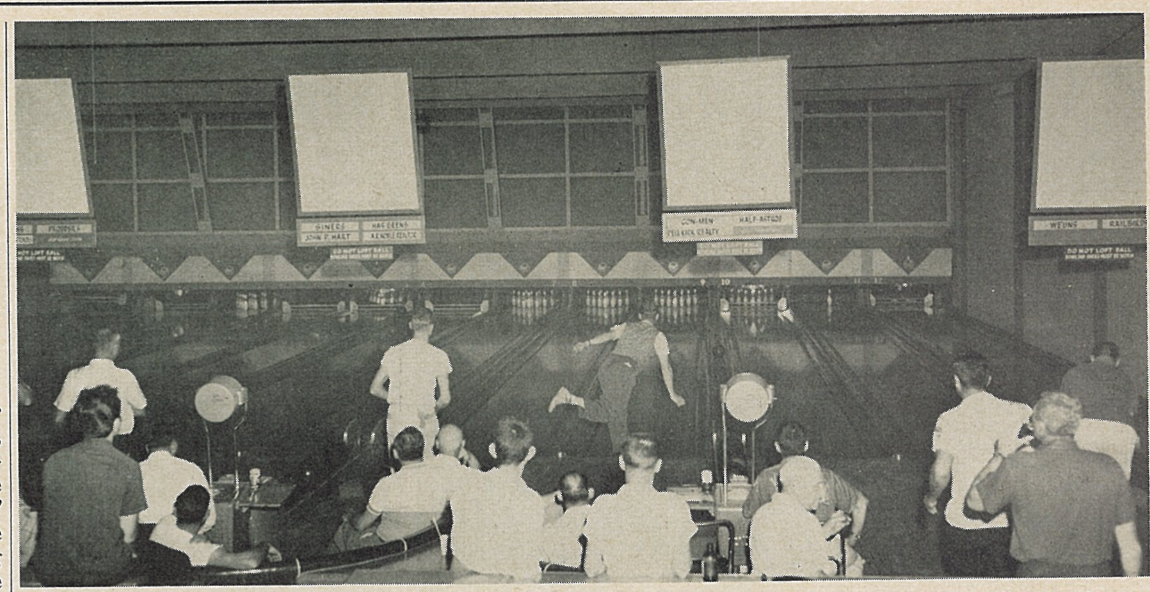
Lawrence Bender (Dept. 31) has been elected president of the Convair SD Rockhound Club.

A member of the club since 1949, Bender previously served stints as vice president and treasurer, field trip chairman and board of control member.

Also elected to office were Ralph Steele (Dept. 188), vice president; Mary Whorton (Dept. 14-6), secretary; and Maurice La Reau, treasurer.

Board of control members include Harry Atkins, Don Chase, Fred Dunivan, George Goetzelman, Mary La Reau, Helen Steele and Ed Wawrzynski.

Commissioner Dan Whorton reported that 27 rockhounds attended the New Year's weekend field trip to Calico. Petrified palm wood, agate and jasper were among specimens found.



ROLLING ALONG—On almost any week night Convair SD keglers are rolling in league play at one of the various bowling emporiums in the San Diego area. Typical of action is this scene on a Thursday night at Victory Bowl in Pacific Beach where the Convair SD Engineering league spreads out over all 12 lanes.

400 SD Swing Shifters Bowl Once Per Week

Working the swing shift doesn't hinder over 400 Convair SD bowling enthusiasts who vie for team and individual honors once a week in five leagues.

Three of the leagues roll during the day at Tower Bowl, one at Pacific Recreation and another at Bowlero.

At Tower, in the 850 league, the Misfits are far and away leading the pack, sporting a record of won 47 and lost 13. Closest rival is the Pin Artist team, seven games off the pace.

850 season honors: HIG, Bob Pearson, 266; HIS, Joe Macke, 664; HTG, Dept. 31 M and C, 1030; HTS, Misfits, 2876.

Tightly grouped standings mark activity in the 800 league, also at Tower. Of 10 teams only six games separate the first eight. Currently topping standings are the Holy Rollers, followed by the Jolly Knights and Experimental.

800 season honors: HIG, Danny Knights, 253; HIS, Frank Kimbro, 660; HTG, All Stars, 981; HTS, All Stars, 2681.

In the Convair Handicap 700 mixed league, three teams are still in running for top awards. They are the Convair Liners, Jokers and Fireballs, now ranked one-two-three in the standings.

700 season honors: HIG, Eleanor Stevens, 199; HIS, Fran Shepherd, 515; HIG, J. DeCosta, 209; HIS, George Peck, 560; HTG and HTS, Jokers, 846, 2277.

In the Convair Swingers league at Pacific Recreation the first place Old Town Winery team has lost but 10 games while winning 38. Second place Go Devils are 3½ games off the pace.

Swingers season honors: HIG and HIS, Frances Brooks, 214, 534; HTG, Hank Williams, 245; HTS, Wayne Lindsay, 633; HTG and HTS, Old Town Winery, 931, 2499.

At Bowlero in the six-team Convair Rocket league, five teams continue to battle back and forth for honors. Only eight games separate the first place Gutter Balls from the fifth place Hustlers. Ranked second, third and fourth are the Satellites, Starfires and 190.

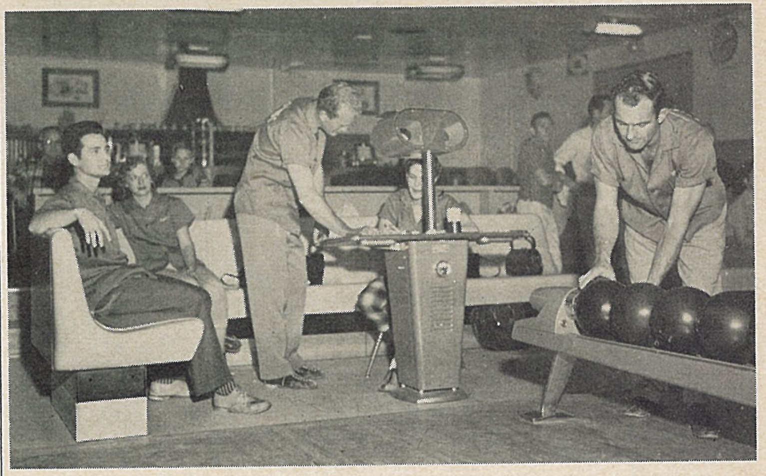
Rocket season honors: HIG, Bob McGhen, 235; HIS, Daryl Johnson, 595; HTG, 190, 894; HTS, Satellites, 2479.

Thursdays Chosen For Code Classes

Classes in Morse Code, under sponsorship of the Convair SD Radio Club, are now being held every Thursday at 6 p.m. in the Radio Club headquarters on Harbor Drive.

In addition to code and theory, requirements for FCC exams are taught in the course. The classes are open to all Convair SD employees.

J. B. Baker, commissioner, reminded club members that meetings will start at the usual time—7:30.



READY TO GO—Typical of more than 150 teams participating in Convair SD keg leagues is Five-O-Two team in Whirlaway 750 league. Currently ranked third in league play they still have chance to overtake league-leading Lucky Five and second place Silver Jets. Team members are (from left): Harold Bradley, Dorothy Simmons, Bob Harvey, Frances Plumley and Clyde Fabares (all in Dept. 31).

Ski Club Sponsors John Jay Film Narration, Travelogue

One of America's top ski photographers, John Jay, who is also an author and commentator, will narrate his ski film and travelogue entitled "White Flight" Feb. 3, 8 p.m. in the Hoover High School auditorium, 4474 El Cajon Blvd.

The program is being sponsored by the Convair San Diego Snow Ski Club.

Tickets at the reduced price of $1 will be available to Convair employees, Commissioner Joe Harris said. However, the discount price can be obtained only by purchasing the tickets at employee services, Plants 1 and 2, or at club meetings. The regular admission price of $1.50 will be charged at the box office, Harris said.

In addition to his nationally recognized standing as one of the world's top skiers and ski photographers Jay was a Rhodes scholar and "March of Time" staffman. He has directed and filmed ski shorts for Warner Brothers in Hollywood, one of which was nominated for an Academy Award.

Some of the highlights of "White Flight" include a ski plane exploration of the world's largest glaciers in Alaska with Gretchen Fraser and Lowell Thomas; Olympic races; '58 FIS world ski meet and top performers in action on Alpine mountainsides.

* * *

Ski clubbers attending the New Year's weekend jaunt to Big Bear skied on man-made snow at Rebel Ridge in addition to dry-run practice.

Harris said the next outing of the club will be held after the first good snowfall in the mountain area.

Girl Cagers Win Holiday Tourney

Though the final playoff game in the pre-season holiday tournament was delayed for three weeks because of a scheduling conflict, the Convair SD girls' basketball team clinched tourney laurels last week.

They scored a decisive 50-31 victory over T.O.T.S.

And they continued their winning ways into regular league play which also started last week, rolling over a Civil Service team, 64-21, and Chula Vista Hospital, 55-23.

Games have been highlighted by both good floorwork and teamwork. Leading scorers to date are Manager Jean Todd (Dept. 192-7) and Joyce Currie (Dept. 61-0), both of whom are tossing in baskets at a 22-point-per-game clip.

In the next league game—Jan. 22—the Convair girls play Rohr. All contests are held at the Hoover High School girls' gym on Monday and Thursday evenings. Spectators are invited.

Broadway Winner Of First '59 Shoot

B. L. Broadway, recently named Convair Pistol Club Champion for 1958, has continued his shooting prowess into the new year.

Broadway (Dept. 603) placed first in both the master class with a score of 294 and first in the .22 caliber short national match course in a shoot held Jan. 11. In the short national his score of 282 was only three points better than the 279 posted by Joe Williamson (Dept. 401).

Other winners were: expert, Carl Hornburg (Dept. 66), 280; sharpshooter, W. G. Walker (Dept. 6), 274; and marksman, R. G. Lair (Dept. 406), 253.

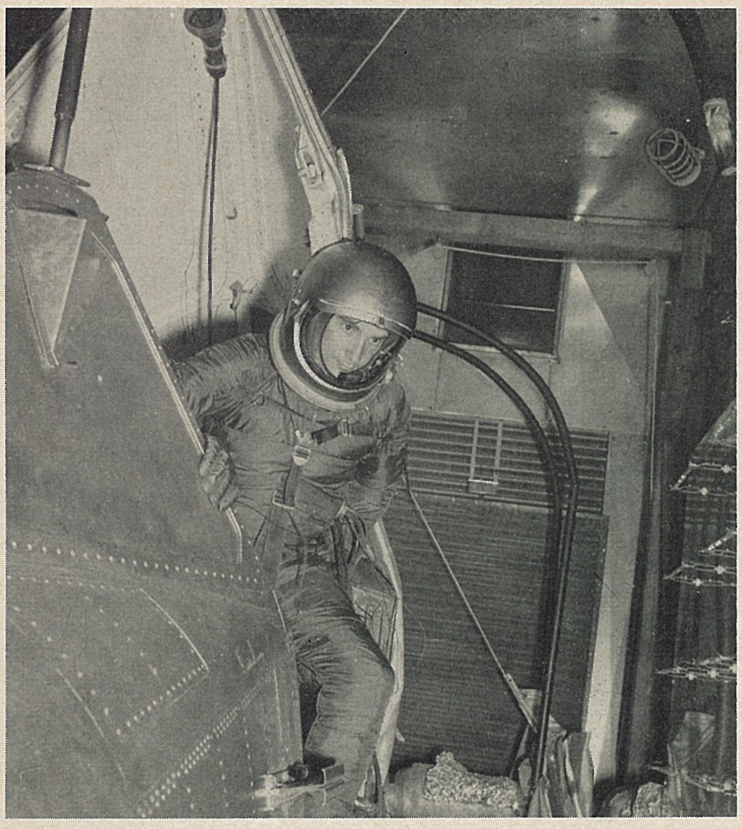
New Ground School Course Scheduled

Another chance for would-be fliers to prepare for CAA private pilots' exams will be offered Convair SD people early next month when a new ground school course starts.

Classes begin Feb. 4 and 9 and will be held regularly thereafter every Monday and Wednesday, 7:30 p.m., at Jim's Air Service, Lindbergh Field for 16 weeks.

Students may choose either evening. The same subject matter will be covered at each.

Prospective flyers may sign up at class time at Jim's Flying Service or call Rex Robinson, ext. 1631, Plant 1, for information.



SPACE SUIT—T. R. Hannelly (Dept. 6), volunteer "pilot," climbs from cockpit in pressure suit under test for use in extremely high speed space vehicles.

Convair Radio Hams Link Families With Crews on Alaska Expedition

Convair Fort Worth and Air Force people taking part in "Operation: Raw Deal" at Eielson Air Force Base in Alaska are settling down to a long, cold winter of testing.

This is probably the coldest winter for most of those involved in the B-58 test project. Temperatures are ranging from a minus 40 to 47 degrees below.

H. A. Dunlavy, customer service representative, has started sending weekly progress reports back to Convair Fort Worth. Reports include everything from what happened and why to comments and recommendations, photos and sketches.

Major K. K. Lewis, Air Force project officer, said that his B-58 flight to Eielson was uneventful and that the B-58 autopilot was the best that he had ever flown.

Max Schelper, CRA radio commissioner, says that CRA amateur radio traffic is going strong between Fort Worth and Eielson.

He says at least three to four messages a night are being handled for Fort Worth families whose husbands and fathers are busy with the project.

Schelper says that the record number of messages handled in one night thus far has been 18.

Radio communication, which started back during the Christmas holidays, will be continued until the project is over in March. Any family which wishes to communicate with Convair people in Alaska may contact Schelper at ext. 3503.

"Operation: Raw Deal" is an Air Force project in which the B-58 and its sub systems are being tested under various Alaskan cold weather conditions.

* * *

An F-106A has been at Eielson AFB the last month for similar cold weather tests, arriving there Dec. 22.

Testing of the plane and ground support equipment in severe cold weather conditions is expected to continue until March.

Convair SD men on duty during the Alaskan test program are Dave Johnson, field service engineer acting as Convair's technical assistant; W. D. Nowell, in charge of ground support equipment; and E. P. Griesell, spare parts.

Convairiety Serves A Pleasant Purpose

A Convairiety staff member was straightening papers at San Diego on a recent Convairiety distribution day when a passing supervisor said:

"Paper day! That always makes me happy."

"Glad you like it," replied the staffer, pleased at first but then deflated by:

"Yep, reminds me I get paid this Friday."

Stress of Space Travel Simulated in Lab at SD

Design of the space vehicle to take the first man into outer space and the type of garments he will be wearing may be strongly affected by two Convair-funded research programs now in progress.

In its final stages is an acceleration study to test a theory of Dr. R. C. Armstrong of Convair SD's aviation, space and radiation medicine group that stresses produced on humans during exposure to high acceleration can be decreased by increasing the pressure of the air he is breathing.

During the experiment, conducted in the human centrifuge lab at the University of Southern California, humans are subjected to simulated "G" stresses that must be endured by occupants of space vehicles while attaining speeds of up to 18,000 mph—rate necessary to put the space machine of the future into orbit.

Results of the study, now nearly completed, have substantiated the theory, said Dr. Armstrong.

"The information obtained will serve as guides in the design of space vehicle environments," explained Dr. Armstrong. "Application of these principles can significantly affect the ability of space pilots to tolerate the combined stresses of space flights and thus increase the safety of the man and his mission."

In a second research program under way in the dynamics laboratories at Convair SD, Plant 1, Dr. Armstrong's aviation medical group is combining with engineering's human factors under Dr. E. G. Aiken to study the ability of man to tolerate extreme temperatures with and without special protective garments.

Convair volunteers are sealed into a cockpit in a special heat chamber for study of physical and psychological reactions to temperatures simulating reentry into the earth's atmosphere or a Mach 5 dash of a very high performance aircraft.

Air temperature in the cockpit is raised from 80 degrees F. to 200 degrees in 19½ minutes; kept at 200 degrees for six minutes, then brought back to 80 degrees in another 19½ minutes. Refrigeration equipment, capable of forming three tons of ice in a day, blows cold air at minus 13 degrees F. to reduce the temperature in the few minutes of time.

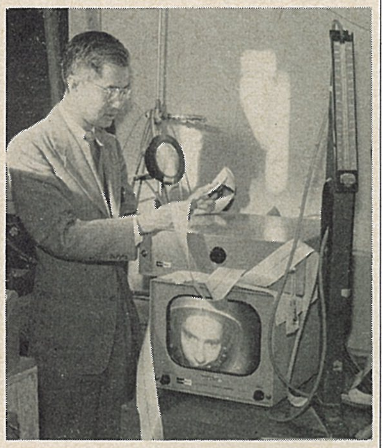
During tests the chamber temperature is kept at 285 degrees F. by an infrared light bank of 40,000 watts supplementing the electrical heating system.

As the cockpit heats up, cool air is used to ventilate the special type of pressure suit, now under study, to maintain a normal body temperature of 98.6 degrees F. The pilot has his own filtered and refrigerated air supply piped directly to him.

While the pilot is subjected to intense heat conditions, he must concentrate on a tracking problem—chasing a random dot on an oscilloscope and bringing it to center by manipulation of the controls, said to be more sensitive than those of an actual plane.

During tests, which last 45 minutes at a time, environmental temperatures, body temperatures, psychological reactions are recorded on instruments in a control room adjacent to the test chamber. Blood pressure, respiration, electrocardiogram, heart rate of the subject "pilot" is checked every three minutes by remote control.

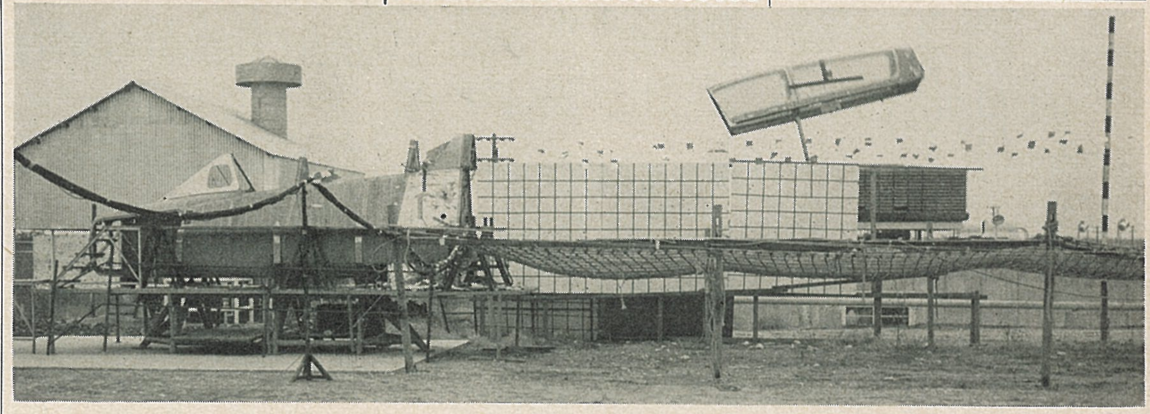
Reactions of the subject are closely monitored by means of a closed circuit television with either Dr. Armstrong or Dr. W. L. S. Wu of the aviation medical group in close attendance. Tests are initiated by the human factors group and conducted in cooperation with the dynamic laboratories which provide testing facilities.



ON TV—Dr. W. L. S. Wu of SD aviation medicine group checks subject's physical condition during tests by graphs and closed circuit television.



CONTROL CENTER—Human factors and dynamics lab personnel, left to right, E. N. Hunter, R. H. St. John (in rear), L. J. Fathera, and W. H. Hanlon, record reactions on instruments in room adjoining test chamber.



ALLEY, OOP!—F-102 canopy sails through air after ejection mechanism is fired during tests at Fort Worth. Canopy plummets into sturdy net and is recovered for re-use.

Canopy Blast Tests Involve B-58, F-106B

Convair Fort Worth test engineers are blowing their tops these days—all in the interest of safety for crews flying TF-102s, F-106Bs and B-58s.

But the tops they blow are not their own. They're the canopies on the jet aircraft built at Convair San Diego and Convair Fort Worth.

To make the tests, engineers set up a nose section on a test rig in the west test area near the north end of the Convair FW reservation.

Instrumentation is installed to gather data on the functioning of everything vital to a proper ejection of the canopy.

Then begins the count-down over a loudspeaker which can be heard throughout the test area—and which warns everyone in the vicinity that the canopy is about to blast off.

Ed Allen, who serves as fire control engineer, stands before an instrument panel inside the control room, a microphone in his hand.

"Thirty seconds to blast-off," his voice booms over the loudspeaker. "Twenty seconds, 10 seconds . . . five, four, three, two, one . . . fire!"

The canopy blows off with an ear-splitting crack like a shot from a B-58 cannon—sails gracefully end over end through the air—and lands with a plunk in a rugged net made of interlaced one-inch rope.

As all this goes on, cameramen from the photo lab are shooting photos, both movies and stills, to record exactly what happened.

Canopy ejection tests at Convair Fort Worth are covered and recorded with high speed Fastax camera of same type used in San Diego to photograph 600 mph hailstones (Convairiety, Nov. 26).

F. E. Carlile, photography assistant supervisor, said film can race through the machine at speeds up to 140 miles per hour to give an ultra slow motion effect when projected.

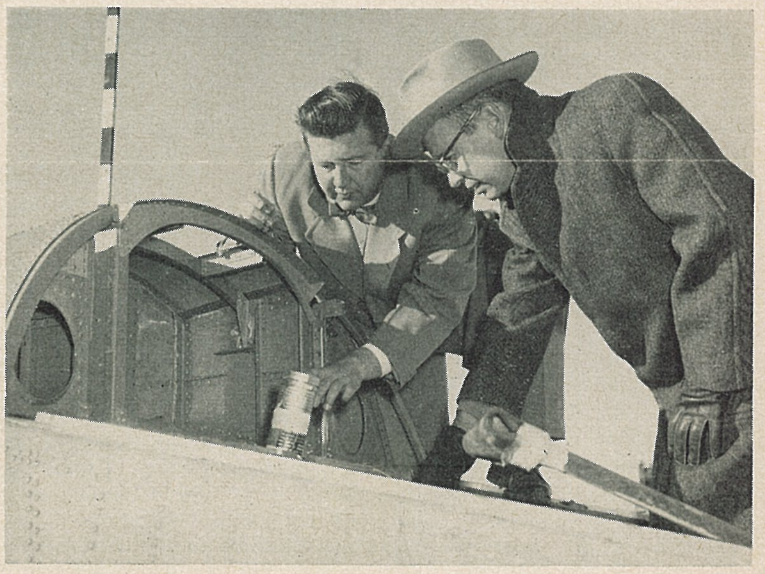
Purpose of all this is to make certain that the canopy is blown clear of the aircraft in such a fashion as not to endanger a pilot or other crew member who may be attempting to escape from the airplane.

Even though the F-106B is being produced at San Diego, canopy testing is performed at Convair Fort Worth because the nose section was designed by FW engineering and built at Fort Worth. The sub-contract also calls for testing of items designed at Fort Worth.

Vital part in the canopy ejection process on the F-106B, used in the most recently performed tests, is the actuator-remover located in the cockpit. When the pilot trips the control, the actuator-remover provides the force required to remove the canopy under all conditions and at supersonic speeds.

John E. Hickok, project test engineer, said that operation of the ejection system has been tested in temperatures ranging from minus 65 to plus 160 degrees.

"The actuator has gone through sand and dust tests at a number of temperatures," he commented. "It has also been exposed to a terrific salt spray and has even gone through fungus tests."



COCKPIT CHECK—John E. Hickok, right, senior test engineer, and E. L. Roper examine actuator-remover in cockpit of F-102 after ejection test.





EIGHT-OH-ONE—For more than an hour last week Convair's jet 880 was not only in the air but "on the air" too, as radio linked plane to shore stations during first flight. (Plane's call sign is "801-TW.") At left is R. L. Runnalls, director of 880 flight test, shown in data handling station in SD Bldg. 54 where data on plane performance was telemetered. Center is 880 cockpit with Pilot Don Germeraad and Co-Pilot Phil Prophett. At right is Convair's radio station on Pt. Loma which was relay point. With binoculars is L. M. Jaquish of Dept. 98 who recorded transmissions. Radio operators are L. W. Passano and A. A. Baker.

C-V CONVAIR

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SAN DIEGO, POMONA AND ANTELOPE VALLEY, CALIFORNIA — DAINGERFIELD AND FORT WORTH, TEXAS



DOWN THE BEACH—Jet 880 comes in for landing at North Island Naval Air Station at end of first flight. In background is venerable Hotel del Coronado. Fishermen kept right on fishing!

880 Continuing Test Flights From Naval Air

Convair's first jet transport is well into its flight testing program this week following a highly successful maiden flight of an hour and 14 minutes last week (Jan. 27).

Making two runs over a pre-determined flight course which took it from Lindbergh Field out over the bay and ocean to Catalina Island and back to Pt. Loma, the white and gold bird awed thousands of people lining the runways and parked at points of vantage on the point.

The plane streaked off the ground at 10 a.m., exactly on time, and was traveling 165 mph when it lifted off, after using 4,000 feet of runway.

Bystanders opposite the takeoff point remarked on the lack of noise as the plane whizzed past, equipped with the "daisy-type" General Electric sound suppressors which will go on all 880s.

Piloted by Don Germeraad, chief engineering test pilot, and P. M. Prophett, assistant chief engineer, flight test, the sleek swept-wing plane climbed above 20,000 feet during the first flight and reached speeds of beyond 300 mph, about half of the cruising speed of 615 mph of which it is capable.

The T-33 Air Force chase plane was hard pressed to keep up with the giant 880 during its climb. Capt. J. B. Jordan of Edwards AFB piloted the T-33 and checked visually on the 880 exterior controls, etc., reporting to Germeraad by radio.

Settling down at North Island Naval Air Station at 11:14 a.m. "like a big white snowflake," as some spectator remarked, Germeraad brought the plane back to meet a crowd of more than 100

(Continued on Page 2)

Radio Chatter Tersely Tells Story of Flight

Eavesdropping on radio transmissions during first flight of the 880 brought a fascinating blow-by-blow account.

Here's what it sounded like:

9:55 a.m. "This is 567 . . . taking off." (567 was the call sign for the T-33 chase plane.)

9:58 "801 Tare William. Ready to roll . . . " (801-TW was 880's call number.)

10 a.m. (801-TW) "Everything looks good!"

10:01 a.m. (801-TW) "Am over Point Loma at 500 feet, chase plane in position."

10:02 a.m. (567) "Everything looks clean . . . am dropping back . . . can't keep up."

10:06 a.m. (801-TW) "At 17,000 feet northbound . . . routine."

10:11 a.m. (801-TW) "Leveling off at 20,000 feet 35 miles off San Clemente Island . . . routine."

10:13 a.m. (801-TW to 567) "Make right turn here . . . start back toward San Diego."

10:13 a.m. (567) "All right."

10:14 a.m. (801-TW) to 567) "Please check noise at right-hand side of plane."

10:14 a.m. (567) "Looks good . . . don't see anything to cause noise."

10:15 a.m. (801-TW to 567) "Pull in again . . . we're going to 200-knot point."

10:15 a.m. (567) "We read 205.5 knots."

10:15 a.m. (801-TW) "Roger."

10:19 a.m. (801-TW) "Are you feeling any atmospheric turbulence?"

10:19 a.m. (567) "No, none at all, but will keep close check."

10:20 a.m. (801-TW) "What do you read?"

10:20 a.m. (567) "We have 162.5 knots."

10:23 a.m. (801-TW) "We're going to make a turn to right."

(Continued on Page 2)

PACE EXPECTED AT FEB. 25 MEET

Frank Pace Jr., president of General Dynamics Corporation, will head a management-studded group slated to take part in the Feb. 25 meeting of the Convair Astronautics Management Club.

The sponsoring industrial engineering department this week indicated invitations will be extended to all General Dynamics directors as well as top Convair officials.

The regular meeting is now planned for the Caribbean Room of the El Cortez Hotel.

Biron Honored for Community Service

R. H. Biron, Convair vice president-administration, was singled out as recipient of the first annual award given by the San Diego Chamber of Commerce for "the most significant contribution to community development" during the year.



R. H. Biron

Selected for the 1958 award for accomplishments of the C. of C.'s University of California committee, of which he is chairman, Biron was honored at the annual membership meeting Jan. 23 in the U. S. Grant Hotel.

Feb. 13 Deadline for Club Scholarship

Convair SD parents are reminded that the deadline is drawing near for registration of their sons or daughters for the Convair SD Management Club scholarship program.

Last date to submit applications and grade transcripts is next Friday (Feb. 13).

20 Qualified at SD for '58 President's Award

Presentation of the President's Award and Mug of the Year will highlight the Feb. 18 meeting of the Convair San Diego Management Club in the Caribbean Room of the El Cortez Hotel.

Convair President J. V. Naish will confer the cost reduction award on an individual whose identity will not be revealed until the meeting. (Twenty CIP contributors, each with more than $25,000 savings to his credit, are in the running).

Mug of the Year is the top annual award bestowed by the Management Club.

Main speaker of the evening will be Donald C. Mitchell, National Management Association member, who will present a talk entitled, "Creative Thinking."

Sponsors are manufacturing control, Plants 1 and 2, manufacturing development and process specifications departments. Members can obtain tickets from departmental representatives. Social hour starts at 5:30 p.m., dinner from 6:30 to 7:30.

Intensive Campaign in Prospect With Cost Reduction as Goal

An intensive drive to encourage all Convair SD employees to turn their money-saving ideas into cash is due to be kicked off soon.

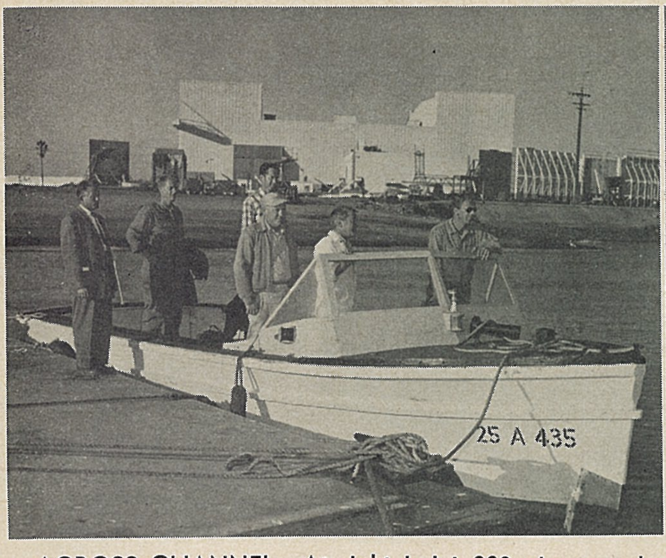
"This year more than ever before we need the active participation of every person working in Convair in our cost-reduction program," stressed E. E. Hartzler, cost reduction supervisor. "Because of the increased complexity, and consequent increased cost, of all types of aircraft, the only way to improve the company's competitive position is by reduction of manufacturing costs."

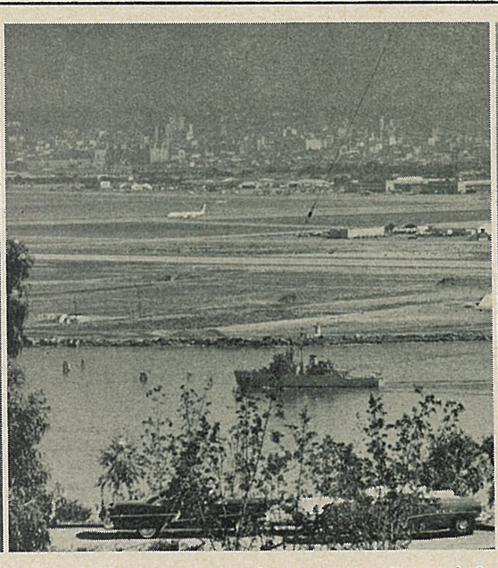
Total installed savings to the company of CIPs and Employee Suggestions during 1958 dropped $700,000 from savings in 1957.

Only ten per cent of all flat-salaried personnel, or 597 individuals, submitted Cost Improvement Proposals during the year.

"Every person in Convair has at least one idea which could benefit both the company and

(Continued on Page 2)







ACROSS CHANNEL—At right is jet 880 at moment of touch-down on North Island and in center is how landing looked from Pt. Loma. Field operations crew embarks at left for trip across channel to service plane. A ground crew of about 75 are maintaining ship on two shifts.



HANDSHAKES—B. F. Coggan, SD Division manager, hands out 880 pins to flight crew as mementos of first flight.

Mrs. Chase to Head Exec. Secretaries

Catherine Chase, secretary to B. F. Coggan, Convair SD Division manager and vice president, was installed president of the San Diego chapter of Executives' Secretaries, Inc., at Jan. 20 ceremonies in the Mission Valley Country Club.

Mrs. Chase, who has been with the company for 17 years, is Convair SD's only representative in the group. A member since 1955, she served as program director two years ago and vice president during 1958.

She has been secretary to Coggan the last five years.



Catherine Chase

Astro Wives Club Forming

Formation of a Convair Wives Club under the sponsorship of CRA is being planned at Astronautics with the first meeting set for 7:30 p.m. Feb. 17 at the Astro cafeteria.

Arrangements are being handled by Mrs. Cornelius Van Twuyver (BR-7-0520) and Mrs. William R. Walker (BR-3-1025). They would be glad to discuss details with prospective members.

Jet Airport Planning Will Be Discussed

"Acoustical Factors in Airport Planning for the Jet Age" will be the topic of tomorrow's (Feb. 5) session of the SD chapter of the Acoustical Society of America.

For further information call A. M. Small (SD-Dept. 6), ext. 1679, Plant 1.

Two From Convair Drown Off Coast

A Convair SD man and woman drowned last Sunday when a 16-ft. outboard motorboat capsized off La Jolla Cove.

Norman T. Sutte (Dept. 603) and Betty Reynolds (Dept. 600), both of Plant 2, were two of a party of four who lost their lives Other victims were Mrs. Reynolds' husband, Joe, and daughter, Mary Frances.

The group had been on a fishing expedition when their craft was swamped by rough seas.

Radio Chatter Tersely Tells Story of Flight

(Continued from Page 1)

10:23 a.m. (567) "All right."

10:24 a.m. (801-TW) "We're 10 miles offshore of Point Loma headed northward for second run."

10:29 a.m. (801-TW) "Will you pull in and give us another air speed check at this point?"

10:30 a.m. (567) "I got 163 knots."

10:32 a.m. (801-TW) "We're going down in speed to check buffet."

10:38 a.m. (801-TW) "We're five miles off Catalina Island at 19,000 feet."

10:39 a.m. (801-TW) "Checking gear operation . . . gear down, flaps 50, 113 knots."

10:45 a.m. (801-TW) "Had a little problem with gear . . . gear down and locked . . . will leave it that way until we get back to ground."

10:47 a.m. (801-TW to 440J, Convair plane carrying press to take aerial pictures) "440J, we will wait for pictures, then going down to island and land."

10:48 a.m. (567) "Right main looks o.k. . . . left main looks o.k."

10:53 a.m. (567) "No hydraulic leaks visible."

10:55 a.m. (801-TW) "Five miles off Point Loma at 11,000 feet."

10:59 a.m. (801-TW to 440J) "I don't think you're going to make it, Bill. We're going to continue in right away."

11:00 a.m. (801-TW) "Ten miles offshore at Point Loma, 9,000 feet. Routine . . . heading in for North Island."

11:01 a.m. (440J) "Can't make if off . . . will not have time."

11:05 a.m. (801-TW) "Five miles offshore at Point Loma southbound at 5,000 feet."

11:09 a.m. (801-TW) "Half-mile off Point Loma, southbound."

11:14 a.m. — Touch-down at North Island!

Cost Reduction To Gain Stress

(Continued from Page 1)

himself if it were turned in," said Hartzler.

Dollar savings from CIPs for 1958 were $1,996,303 and from ESs, $490,021. Out of the 3,183 hourly employees submitting suggestions, 1,145 received awards.

Receiving the most cash during the year for their Employee Suggestions were: Lorrain D. Clark (Dept. 230), $764.20; J. H. Parsons (Dept. 280), $725.30; L. F. Pendarvis (Dept. 288-5), $688.45; E. B. Kellogg (Dept. 192), $626.60; B. J. Jarrell (Dept. 267), $625.05; R. L. Lecuyer (Dept. 25), $606.60; and T. S. Potts Jr. (Dept. 400-1), $546.50.

Convair SD handed out $59,637.20 in ES awards during 1958, a drop of almost $20,000 from the year before.

"Convair would be only too glad to boost its award payments for more concrete suggestions on ways to cut costs," concluded Hartzler.

Ground Crews Ferried To NAS for 880 Work

(Continued from Page 1)

press and officials.

Scheduled to be up for two hours, Germeraad shortened the first flight because of minor landing gear operation difficulties.

"Airplane performance and flight characteristics were exceptionally fine for a first-flight evaluation," Germeraad said. "The engines performed very well, with no trouble squawks whatever."

Over 50 SD engineering personnel and three General Electric field representatives listened in on Germeraad's in-flight radio comments via "Operation Eavesdropper," set up on the second floor of Bldg. 5 at SD.

Crowding Room 212 and the hallway outside the flight test control point which taped conversation received by telephone wire from the Pt. Loma communications center, SD people strained to hear every word passing between Germeraad and the T-33 pilot.

Plane No. 1's call letters were its registration number — N801-TW. All TWA 880s on order will carry the letters "TW" and the block numbers of 801, 802, etc., in sequence.

Few first flights at San Diego ever drew the public attention that centered on the 880 last week. Spectator traffic was heavy on Pt. Loma and some school teachers (such as Maureen Doyle, second grade instructor at Coronado's Central Elementary) took their classes outside to catch a glimpse.

Said R. L. Runnalls, director of the 880 flight test program, "The entire flight operation was extremely well coordinated with the chase plane, communications and ground crew so synchronized that we were able to maintain constant contact and keep track of the progress of the flight every minute."

The maiden flight of the 880 was the first time a prototype Convair jet had made a first flight from Lindbergh Field since 1947 when the jet XB-46 was flight tested.

The 880 will be at North Island during 10 hours of flight tests, George Putness, chief engineer of flight test, reported. This will take at least another week and three or four flights. It will then return to Lindbergh Field for most of the rest of the 14-month test program, with the exception of several weeks this summer when it will be at Edwards AFB for takeoff and landing tests.

First 880-flight envelopes are now on sale at SD employee services, Plants 1 and 2, and the Bldg. 19 post office.

The envelopes, carried by the 880 on her maiden voyage, were cancelled at 11:30 a.m., Jan. 27, shortly after "touch-down" time. They are priced at 25c each.

A ground crew of about 75 from SD field operations are ferrying back and forth via Convair surface craft to maintain the plane on two shifts.

"The operation of the plane was sufficiently trouble-free so that a minimum of time was needed for a ground check of its systems in preparation for its next flight," Runnalls added.

The same crew that took the plane up for its first flight will continue on other test flights, with the possible exception that John Knebel may alternate with Prophett as co-pilot. Crew members are J. E. Moroney, senior flight test engineer; E. H. Davies, senior instrumentation engineer; R. M. Bloom and B. B. Gray, senior control engineers.

Wilkens Is Speaker At IRA Gathering

D. C. Wilkens Jr., manager of industrial relations at Convair San Diego, was the principal speaker at the annual installation dinner of the Industrial Recreation Association Jan. 31 at the El Morocco restaurant.

Gil Crosthwaite of the Convair SD Recreation Association was installed as vice president of the IRA which is composed of 26-member organizations in the San Diego area.



LEAVE TAKING—J. V. Naish, Convair president, right, chats with his new executive vice president, August C. Esenwein, during farewell dinner for latter in Fort Worth. Esenwein, former FW Division manager, has taken up his new responsibilities in San Diego.

★ Convairiety ★

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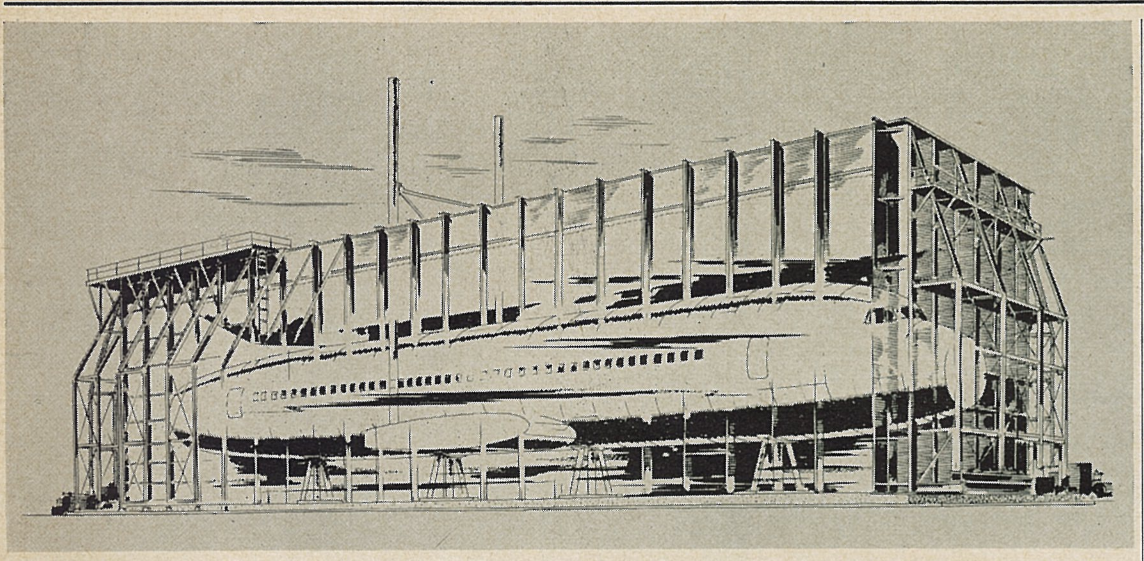
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 69C, mezz., ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; Bobbie Sue Marr, Horace A. Baker Jr.

Pomona Editorial Offices, Room K-222. Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



SUBMERGED—Drawing of Convair 880 fuselage as it will look in large hydrostatic test tank at ramp for structural tests under water. Stub wings will extend out of tank sides through rubber boots.

Frogmen at SD Drill in Preparation For Underwater 880 Inspections

Three new "frogmen" have learned the art at Convair San Diego and several others have brushed up on their technique in preparation for going "down to the sea" with the jet 880.

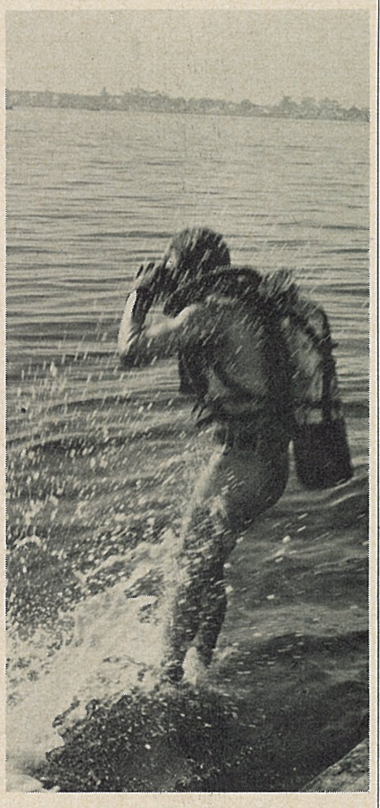
They are preparing for underwater inspection and photographic duty come the time when an 880 fuselage will be completely submerged in a giant hydrostatic test tank at the SD seaplane ramp. Covering the test plane with water is part of an extensive pressure testing program destined to start soon.

In preparation for their wet working conditions, Obed Bobbitt (Dept. 6), engineer; Jerry Green (98-8), photographer; and Don Wood (Dept. 3-7) have completed a recent course in underwater training taught by Art Thomas (Dept. 25), Convair SD diver. Earl Moore and Bob Callahan, both of Dept. 31 and experienced divers, assisted with the instruction. (John Gillette of SD engineering was unable to finish the course because of an auditory infection.)

The 40-hr. underwater course on the proper use and maintenance of diving equipment was coordinated by J. B. Baker of educational services section.

The course, extending from early December through the second week in January, covered about nine days of actual training. Delays were caused by bad weather conditions and holidays, said Baker. Diving had to be held up at one point when a storm carried away part of the operating dock at the ramp.

The men were familiarized with the use of all equipment and underwater safety, before and during dives starting at 15-ft. depth and increasing until they were "graduated" after deep-sea dives of 85 ft. in the open ocean. Men dived in pairs, staying down about 40 minutes to over an hour. While under water trainees were taught to remove and replace face plates and mouth pieces without swallowing water and even to leave their air tanks at the bottom, surfacing, then diving again to retrieve them.



IN YOU GO—Jerry Green hits water, sprinkled by splash created by John Gillette, who preceded him.

Except for Bobbitt, all of the men taking the course had had some previous underwater training or skin diving experience. He said that after becoming used to being under instead of on top of water that he thoroughly enjoyed it.

Bobbitt's duties in the 880 testing program will include diving into the tank several times a day to check the fuselage for failures and to record growth of any fatigue cracks and damage increase. Moore and Callahan will assist in the underwater inspection.

Don Wood of educational services will act as standby diver or safety man whenever needed.

Green has been assigned to the project as motion picture section photographer to take a photographic record of the test results.

The cycle article (99-4) is due at the ramp this week with testing to start the latter part of the month. The hydrostatic test program will be conducted by the structural test lab with W. E. Wise, group engineer, assisted by A. R. Vollmecke, assistant group engineer, in charge of 880 tests.

Maj. Don Kirkpatrick Wins Commendation

Maj. Don O. Kirkpatrick received the Commendation Medal recently from Col. Leonard R. Hall, Convair Fort Worth Air Force plant representative.

The medal was presented by direction of the Secretary of the Air Force for meritorious service as chief, engineering support division, at Convair San Diego from December 1956 to August 1958.





VISITORS—In top photo Larry Granstedt, Astro chief tool engineer, left, hosts Majors Gordon Palmer and Harold Wanfried during five-week assignment at Astro Division. They have been assigned to SD Division for some months under Air Force "Training With Industry" program. In lower photo Capts. T. L. Griswold and H. D. Clark, on year's assignment at Convair Fort Worth, are shown during brief visit to SD Division. At right is R. R. Hoover, SD assistant chief engineer.



"LIGHT" TOUCH—It isn't always solemn during Atlas countdown at Cape Canaveral. Here's comedy touch as Cal Fowler presents king-sized match to Wilford R. Jackson, test conductor, probably with some such wisecrack as "if it doesn't start when you press the button, try a match!"













SCHOOL FOR DIVERS—In lower center are principals in diver class recently completed at SD. Standing: Bob Callahan, Jerry Green, Don Wood, John Gillette. Crouched: Obed Bobbitt, Jesse Baker (Dept. 3-7, course coordinator), Earl Moore, Art Thomas. Training was conducted in San Diego Bay off Convair seaplane ramp and in ocean off Pt. Loma.

Convair FW Engineer Wins Top IAS Award

Writer of the winning technical paper of the year, Convair Fort Worth's Joseph T. C. Liu brought home the 1958 "Minta Martin Award" from the annual winter meeting of the Institute of the Aeronautical Sciences in New York last week.

Title of Liu's paper (a mouthful in itself) was "The Laminar Boundary Layer Flow on the Axi-Symmetric Body with Traverse Curvature Effect." This same paper landed him the 1958 Student Paper Composition Award sponsored by the Texas section of IAS.

Born in Tientsin, China, Liu attended Michigan University.

More Appointments On F-108 Announced

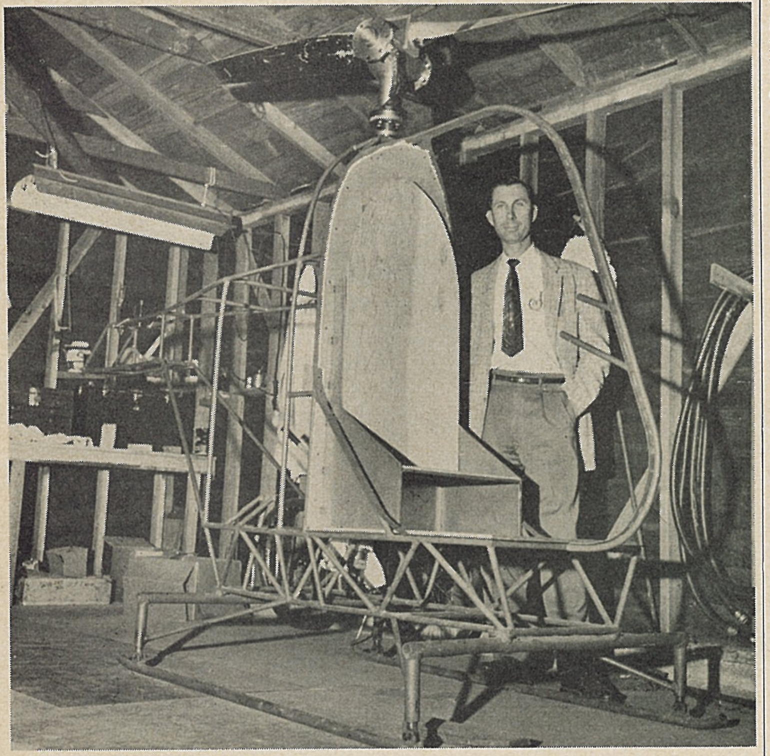
Additional appointments to the F-108 wing program at Convair SD announced by B. F. Coggan, SD Division manager and Convair vice president, involve seven SD men.

Forming the F-108 project team under W. S. Stroud are: J. E. Hughes, engineering; E. F. Monsees, material; C. W. Power, contracts; E. H. Schmidt, program control; W. P. Woods, tooling; F. L. Farrell, administration; J. J. Swarts, quality control.

Tool Designer Chooses Whirlybird To Beat Crowded Freeway Traffic

Unlike several million others in Southern California who fume over freeway traffic but put up with it, Convair Pomona's Max Moldenhauer (Dept. 24) is doing something about it. He's building himself a helicopter.

When completed he expects the "whirlybird" to have a speed of 75 miles per hour, a ceiling of about 10,000 feet, a range of approximately 500 miles, and to get around 30 miles per gallon of gasoline. At present the machine is designed for one passenger, but Moldenhauer believes it can easily be redesigned to accommodate two.



WHIRLYBIRD—Convair Pomona's Max Moldenhauer (Dept. 24) is one person who is doing something about freeway traffic. He's building himself a helicopter. He has designed everything but power plant, which is 53 horsepower motorcycle engine, and expects to have bird ready for testing within next few months.

Moldenhauer started building the machine from his own designs about 18 months ago. It would have been completed several months ago, except for an automobile accident about eight months ago in which both he and his wife were seriously injured.

"The accident set us back both physically and financially, and as a result I had to suspend work on the helicopter temporarily," he said. "However, once I start again I expect to have the machine ready for testing in about four months, by working on it evenings and weekends."

The airframe itself, made from steel tubing, is already completed. He has most of the other parts he needs, and completing the machine is mostly a matter of assembly. However, there are several remaining problems, including designing and making a housing for the transmission, and a cooling system for the transmission lubricant.

The helicopter will be powered by a 53 horsepower motorcycle engine, which Moldenhauer already has. This engine develops 5,800 revolutions per minute, and the main rotor cannot exceed 240 rpms, he said. This means that a complex transmission is needed—the housing will be larger than the engine—and that cooling the lubricant will be a problem.

Moldenhauer, who is a tool designer at Convair Pomona, is also a machinist, and during World War II he was a licensed aircraft mechanic. Although he is not an engineer, he read all of the material he could find on helicopter design and operation before he completed the designs for his own machine.

Most of the work on the helicopter to date has been done by Moldenhauer himself, although he has had some help with the welding. Some of the parts, such as gears, were made to his specifications by commercial firms.

Winning Combination

Convair SD Father-Son Team Race 122 m.p.h. 'Dragster"

Take a 1932 Ford frame, add a transmission from a '39 Ford, power with a '56 Corvette engine, wrap the works with aluminum sheathing (acquired from the salvage yard at Convair SD) and you have what is known in "hot rod" lingo as a Class C "dragster."

And what do you do with a Class C "dragster?" You race it. You race it if you have enough nerve to sit behind the wheel and hurtle down a quarter-mile drag strip at 122.6 miles per.

A good driver would cover the quarter mile in 10.46 seconds. One such driver is Jim Heck Jr. of Dept. 25 at Convair SD.

Every other Sunday for the last six months at the Paradise-Mesa drag strip he has buckled himself into the harness of the racing driver and climbed into the "sling shot" seat located directly between the two rear "gum" tires. (Gum tires are without treads and used for faster starts on the track.)

After a few minutes of encouragement from his dad, Jim Sr., he draws the goggles over his eyes, peers up the quarter-mile strip, making a mental note to stay on his side of the white line (if he crossed it he would default), touches off the magneto ignition that brings the motor to life and tears away down the strip.

Race over, father (who also works in Dept. 25 at Convair SD) and son review the car's performance, always trying to cut precious tenths of seconds off the elapsed time.

But they have cut the time as short as anyone in the Southern California area. To prove it they have a total of 42 trophies.

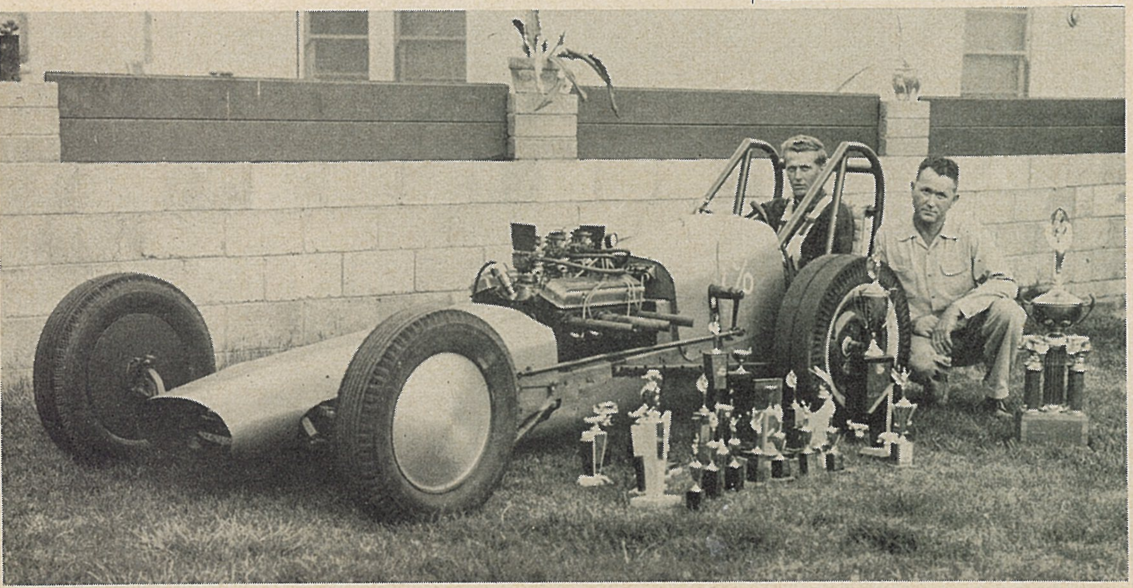
"Both the biggest thrill and biggest trophy we have ever received is the perpetual trophy awarded top car and driver for most points won during a season," Jim Sr. says. The father-son team won it late last year for the first time.

"During our free time, when we are not racing, we spend hours tinkering with the motor and car," Heck Sr., adds.

The engine itself is stripped to the bare necessities. It has no generator, standard ignition system or water pump.

Father and son did all the work, both designing and building themselves. An estimated $1,500 has been spent on it.

The car is made as safe to drive as possible. In addition to safety and shoulder belts, a "roll bar" guards both sides of driver's seat to protect him in case of a spill. To keep flames from flaring back, a steel plate is placed over the three carburetors (called "jugs" by hot rodders). Another steel cover over flywheel keeps it from flying loose through air.



DRIVER AND COACH—Jim Heck Jr. and Sr. display "dragster" and trophies won in competition during last two years. Large one at right is perpetual trophy, top honor awarded in Southern California area.

Astro Man Named On National Board

Dean H. McCoy, engineering office administration supervisor and member of the Astronautics Employees' Con-Trib-Club board, has been named to a three-year term as a member of the National Budget Committee for various welfare groups.

This committee, composed of 104 community leaders from 74 cities in 30 states, helps to formulate plans, budgets and reports for health and welfare agencies throughout the United States.

McCoy, an active participant in community welfare work in San Diego, assumes his duties March 23-25 at a meeting set for New York City.



GOING DANCING—The Kodaseets, Gary, Charlotte and six-month-old Vixie Hoc, are dressed up and ready to depart for evening of Indian dances. Kodaseets are members of Thunderbirds, group devoted to perpetuating Indian dances and customs.

Full-Blood Indians Band Together To Revive Ceremonial Dances

A Convair Astronautics man and his wife are helping to perpetuate one of the oldest customs in North America—Indian dancing—through one of the most exclusive clubs in San Diego.

They are Gary (Dept. 341) and Charlotte Kodaseet. Both are members of the Thunderbird Club, a group open only to full-blood Indians. Locally, the group has about 21 members.

Thunderbirds, as individual members are called, gather often for social affairs, although they are best known for their professional entertainment through authentic Indian dances. They perform for clubs, visiting dignitaries, at shows, in parades and often at "Pow Wows" for their own entertainment. In the latter, trophies go to the best performers and Gary has more than one award of this nature.

The Kodaseets maintain an extensive recorded library of Indian songs and dances common to their tribes. Gary is a Kiowa. Charlotte is a Cheyenne and a former tribal beauty "princess."

Both learned to dance at an early age in their native Oklahoma and began to study dancing customs while still quite young. They came west four years ago when Gary joined the Marine Corps. Kodaseet came to Astro as a stock clerk about two months ago following his discharge.

"Few think of Indians as a people who love to sing and dance," Gary says.

But sing and dance they do!

In fact, there is a dance for just about any occasion. One for harvest, a prayer for rain, braggart versions of war dances and shield dances and the stately buffalo dance.

Kodaseet pointed out that although songs and dances may sound and look much alike to outsiders, each has its own story or legend. And their titles, translated into English, sound much like popular tunes. For instance, "You're in My Heart to Stay" and "Hero's Empty Saddle."

All Indian music is accompanied by a drum or tom-tom. And drums always duplicate the beat of the human heart—a loud thump, followed by a softer one. Only the tempo changes from fast to slow to follow the singing.

While Indian braves did much of the dancing in earlier days, there were and still are dances in which the women take part. One is the "Owl Dance" which is more often called the "two step." It is so much like the modern square dance that observers often are confused. But it is an authentic Indian dance, passed down through the years.

The Kodaseets both possess beautiful Indian costumes. The male version contains many feathers and adornments, while the female dress is beautifully tailored of deer skin.

One discussion provokes a laugh with the Kodaseets and that is language differences. Their tribes speak different tongues. Now they are wondering which to teach six-month-old Vixie Hoc Kodaseet.

"I think perhaps we'll just settle for English."

CRA Astronomers at Fort Worth Building Own 19-Inch Telescope

Stars at night are big and bright at Convair Fort Worth, but after completion of the CRA astronomy club's new 19-inch reflector Cassegrainian telescope, they'll look even brighter.

Target date for star gazing through the $25,000 scope has been set for March 31.

Presently the club is in the process of erecting a special "dome house" for the new telescope, said to be the fourth largest in Texas.

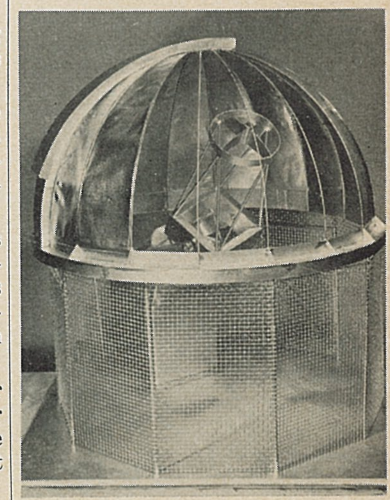
The University of Texas has 82- and 36-inch scopes in an observatory in the Davis Mountains near El Paso, and there is a privately owned 20-inch scope in Odessa.

Ground breaking ceremonies for the dome house were held earlier this month. The new structure will be located about 35 feet southwest of the CRA patio.

Work has also been going along simultaneously on the scope itself.

Around 25 club members have spent over 240 manhours on the mirror alone, Commissioner Art Gilligan pointed out.

According to Gilligan, one of the toughest jobs was boring a four-inch hole through the center of the mirror. The mirror for the telescope was ground from a huge 75-pound block of pyrex.



NEW DOME HOUSE—Scale model shows how CRA astronomical telescope will look at Fort Worth when completed. Cassegrainian 'scope will be about 10 feet long.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., airframe and missile builders.

Electric Boat of Groton, Conn., submarine builders.

Stromberg-Carlson, of Rochester, N.Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N.J., electric motors, generators.

* * *

Canadair Seeking Sales For Turboprops Abroad

MONTREAL—Two new members of the sales staff of Canadair Limited, last month started tours to introduce two new turboprop transport airplanes, the long-range, four-engine CL-44 and the medium-range two-engine Canadair 540.

The new tours follow a round-the-world trip by Peter H. Redpath, Canadair's vice president for sales.

Matias Carlos "Charlie" Flynn, who was born in Santiago del Estero, Argentina, and educated in Buenos Aires, and who has spent most of his business career there, left Montreal on a South American tour which will take him to Rio de Janeiro, Sao Paulo, Montevideo, Buenos Aires, Santiago (Chile), Lima, Quito, Bogota, Medellin and Caracas.

Earl O'Mara left for a trip through the Middle East and Far East, traveling by way of London to visit New Delhi, Rangoon, Bangkok, Djakarta, Karachi, Addis Ababa, Jidda and Cairo. Formerly a United States citizen, and a graduate of St. Michael's College in Toronto, O'Mara took Canadian citizenship in 1946 after five years' service with the Royal Canadian Air Force. He had previously been a trader at the Toronto Stock Exchange.

The two new types of transport are to begin coming off Canadair's production lines next autumn. Quantities of each have already been ordered by the Royal Canadian Air Force in the military version, and both aircraft are being offered now in commercial airliner, cargo and convertible versions, the Canadair 540 in executive versions as well.

The first CL-44 is due off the production line in August with first flight planned for the latter part of September or first week in October.

Meanwhile, the first of two prototypes of the Canadair 540 was rolled out of the factory here last month. The prototypes are Convair 440s modified to carry turboprop power plants. The 540s also will carry the designation CL-66.

High Fidelity Auto Radios on Market

ROCHESTER — Stromberg-Carlson is now manufacturing and marketing high fidelity auto radios for the new car market.

Stromberg-Carlson has had long experience in the field of auto radios, having been a prime supplier of auto speakers to the Ford Motor Co. for many years, and more recently has manufactured radios for the Edsel. In fact the company has been in the auto radio business for 26 years, having made the first Stromberg-Carlson auto radio in 1933.

The new Stromberg-Carlson auto radio receivers will be marketed through automotive radio and specialty distributors on a national basis.

Stromberg-Carlson Sales, Payroll Rise

ROCHESTER—Both sales and payroll of General Dynamics Corporation's Stromberg-Carlson Division, Rochester's second largest industry, showed moderate gains during 1958, despite the general business decline which affected the entire economy.

At Stromberg-Carlson, substantial orders have been received for telecommunication and electronic equipment from both industry and government. New products developed during the past year should lead to an even greater volume.

Highlighting technical advances at Stromberg-Carlson in 1958 was the issuance of 114 patents to Stromberg-Carlson inventors during the 12-month period.

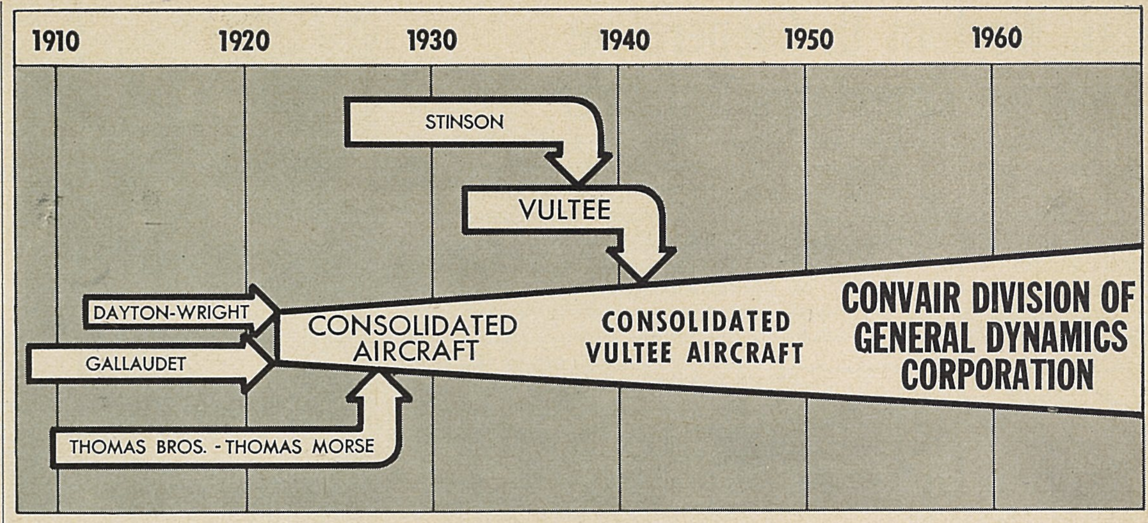
Carbonic Planning Research Program

CHICAGO—Dr. Frank J. Soday has joined the Liquid Carbonic Division of General Dynamics Corporation as director of research and development, Rex. L. Nicholson, president of Liquid Carbonic announced last month.

Vice president, research and development, for the Chemstrand Co. for the past seven years, Dr. Soday will be responsible for organizing a research and development program for Liquid Carbonic.

SUBMARINE NAMED GEORGE WASHINGTON

GROTON — Two nuclear submarines being built here by Electric Boat Division of General Dynamics have been named the George Washington and the Patrick Henry.



BACK TO 1908—Rough chart shows generally the early "tributaries" that came together to form what is now Convair Division of General Dynamics Corporation. General Dynamics itself has roots that go back deep in U. S. history. These will be covered later. In the meantime, this first of a series starts with Edson Gallaudet in 1908.

Five Years Ago...

Following are brief excerpts from Convairiety of five years ago:

★ ★ ★

South half of assembly building at Convair Fort Worth is readied for production of B-36 spare parts and components.

* * *

Convair's first R3Y "Tradewind" makes maiden flight, taking off and landing on San Diego Bay after two hours in air.

* * *

Installation of 750-ton capacity stretch forming machine begins at Convair Fort Worth.

* * *

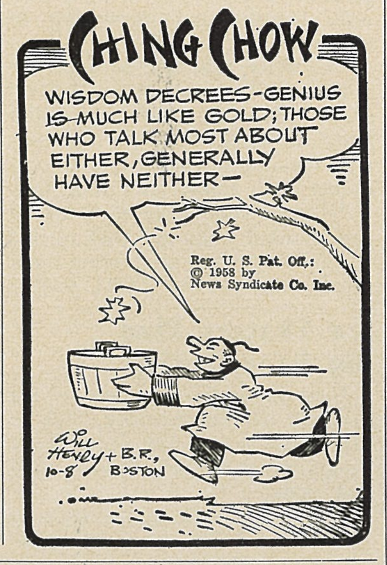
Con-Trib-Club at Convair SD establishes $25,000 "disaster fund," to be used in case of civilian disaster or calamity.

* * *

John Jay Hopkins, chairman of Convair Board of Directors, predicts that supersonic long-range bomber, now in development stage, will follow B-36 on Fort Worth production line.

* * *

Averaging 325 mph, Convair-Liner 340 sets coast to coast (San Diego to Miami, Fla.) record for twin engine aircraft—seven hours and eight minutes.



Convair History Begins In Installment Form

(This is the first installment in a history of Convair Division of General Dynamics Corporation which will be continued from issue to isssue of Convairiety. It is excerpted from extensive research material gathered and edited by Howard O. Welty, now chief of editorial in Astronautics Division's communication department, and Nelson Fuller, manager of research and history, Convair General Office public relations.)

Convair's Earliest Roots Traced Back to Edson Gallaudet in '08

Like a river, Convair developed from many tributaries. The one that goes back the farthest in point of time was created by Edson F. Gallaudet when he opened an office in Norwich, Conn. in 1908 with the intention of building airplanes as the Gallaudet Engineering Co.

Gallaudet, a pioneer aeronautical engineer, as a child was fascinated by man's dream of flight. After graduating from Johns Hopkins in 1896 with a doctorate in engineering, he taught physics at Yale, but spent so much spare time on aeronautical experiments that older faculty members labeled him eccentric.

These labors in 1897 and 1898 resulted in a model kite (now in the Smithsonian) which included his conception of the warping wing. Had he fully developed his ideas he might have been the first to achieve heavier-than-air flight, for the Wright Brothers did not hit upon the warping principle until July, 1899.

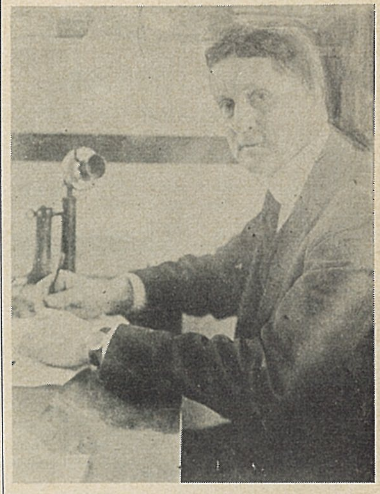
The pioneer glider pilots of those days corrected the tipping of a wing by shifting their weight. The Wrights determined the same effect could be achieved by mechanically altering the wing's camber. (Glenn H. Curtiss subsequently fashioned an aileron for this purpose and years of bitter patent litigation followed.)

In 1908 Gallaudet opened his office in Norwich. In 1911 he learned to fly at the Wright Brothers school. Meanwhile, he began plane manufacture with his brother, Denison. In 1912 they exhibited the Gallaudet A-1 "Bullet" at New York City's first Aero Show, held in May in Grand Central Palace.

Bullet was a stubby, low-wing monoplane having the pusher mounted aft of the tail section. It was very fast for that day. Gallaudet claimed to have achieved 130 mph, faster than most World War I fighter planes ever attained. The Bullet cracked up two months later, injuring Gallaudet.

Gallaudet's next design appears to have been a monoplane flying boat, the Model B. (This was the work in hand when Felix J. Rossoll, then 18, got a job at Gallaudet in 1914. Rossoll remained with the company through dissolution and merger and continues to work for Convair to this day, in Dept. 15 at San Diego Division.)

In 1914 Gallaudet also completed a biplane trainer, one of the first U. S. aircraft with plywood fuselage. In 1915 he undertook construction of a radical seaplane, the twin-motored D-1.



Old and faded photo shows Edson F. Gallaudet, brilliant aeronautical engineer of aviation's early days, at his desk.

Canadair's First 540, Converted 440, Rolled Out at Montreal

MONTREAL — First Canadair 540 (a Convair 440 airframe converted to Eland turboprop power plants) rolled out of the Canadair plant here Jan. 19.

The second converted 440 is expected to follow sometime this month.

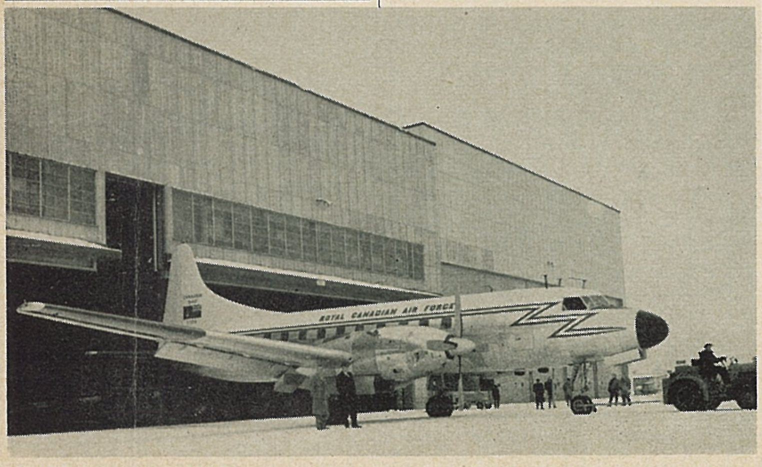
The two aircraft are being made available to the RCAF until Canadair begins delivery of its own Montreal-built airframes later this year.

Conversion involved new nacelles, increased fuel capacity, improved braking and faster retraction of the undercarriage.

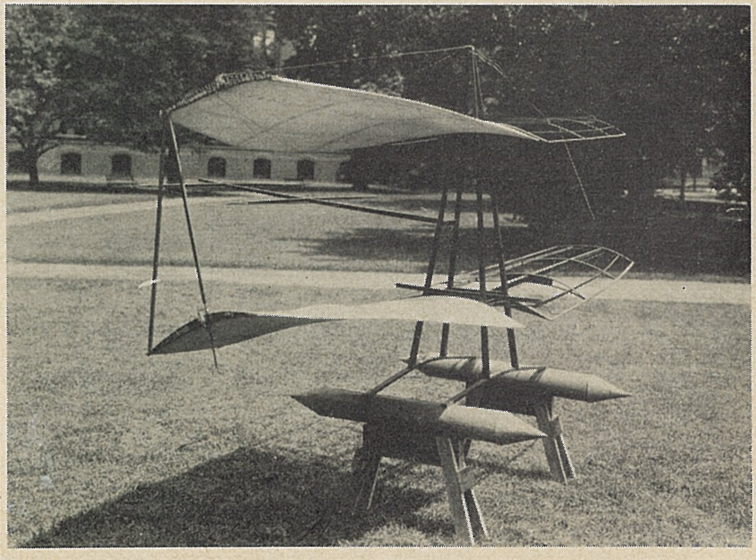
Military version of the Canadair-built aircraft will be primarily a cargo carrier, though easily convertible to passenger use or a combination. Ten have been ordered so far by the RCAF, designated type "C-109." In commercial versions the 540 is being offered in passenger, cargo and executive configurations.

Exterior dimensions of the Canadair 540 will be the same as the 440. However, the Canadair-built airframes will have a three-foot longer passenger cabin and there will be seats for 48 passengers, or 58 in the high density version.

Maximum takeoff weight of the turboprop is 53,200 pounds or more than two tons greater than the 440. Useful load is more than 3,000 pounds greater.



WHITE RUNWAY—First "Canadair 540" is rolled out at Montreal in colors of Air Transport Command, Royal Canadian Air Force.



This is Edson F. Gallaudet's kite-flown, wing warping experiment. Photograph from Smithsonian Institution.

Cal. Western U. Cooperative Program Completes 3rd Year

Convair San Diego and Astronautics Divisions are completing their third year of cooperation with California Western University in the field of management development with the coming spring semester.

Registration at the Downtown Division, 1729 Fifth Ave., closes today (Feb. 4), 5:30 to 8:30 p.m. By special arrangement, late registration may be made up to the beginning of classes next Monday (Feb. 9).

Convair-paid tuition has been arranged again for 187 SD and 62 Astro supervisors and non-represented flat-salaried people. Approved courses are in the fields of industrial management, business administration, finance, accounting, and personnel relations. Last semester 223 SD and Astro people attended evening classes.

Some liberal arts classes may also be approved depending upon the individual's Convair classification or applicability of courses toward a degree or certificate program.

Eligible night-shift participants may enter day classes at the Point Loma campus if working arrangements make attendance possible throughout the entire semester.

To register under the Convair-Cal. Western program, SD and Astronautics applicants must obtain forms from their department manager or superintendent, or from the educational coordinator of each division.

D. G. Walton, ext. 1827, SD Plant 1, is in charge of SD registration, and J. J. Block, ext. 1471, Astro site, is coordinator for Astronautics registration.

New students also must have signed approval of their manager or superintendent before registration.

Non-management personnel are not eligible for the Convair-California Western U. program, but may register for a similar schedule of classes under provisions of the regular Convair tuition refund policy.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Feb. 1 through Feb. 15:

Twenty-year: Dept. 116, B. C. Davis.

Fifteen-year: Dept. 2-2, A. E. Hill; Dept. 6-51, C. D. Minor; Dept. 15-6, M. R. Hutchison; Dept. 31, J. M. Morales; Dept. 66, W. T. MacCarthy; Dept. 97-2, R. C. Paulsen.

Dept. 110, H. S. Patteson; Dept. 115, Albert Reiter; Dept. 123, R. B. Buchanan; Dept. 188-3, Carlos Hernandez; Dept. 232, J. S. Knight; Dept. 233, L. M. Powell; Dept. 280, J. E. Slusher; Dept. 292-3, C. A. Walling; Dept. 600-1, Joseph Gann.

Ten-year: Dept. 15, J. J. Alkazin, H. T. DeMers Jr.; Dept. 25-6, G. E. Parker; Dept. 31, Rudolph Kiesel Jr., Marie P. Nelson, F. T. Streeter; Dept. 101, Sarah E. Harbert, J. M. Weese; Dept. 136, Eileen B. Pegues; Dept. 180, C. R. Woody; Dept. 188-8, Lela C. Guest.

Dept. 192, Bessie U. Crook, Virginia L. Morgan; Dept. 233, Grace B. Hagen, Nora P. McCartney; Dept. 271-0, E. A. Baxter; Dept. 280, B. H. Hill; Dept. 282-2, Nellie C. Woolever; Dept. 288, Daisy K. Christensen, W. B. Harper, H. E. Kinghorn; Dept. 403, Alexander Mayshack; Dept. 600-1, L. A. McCurry.

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective Jan. 19:

Dept. 6, Engineering: To engr. planning & estimating asst. supervisor, J. T. Helstowski. To weights group engineer, C. E. Beddoes. To research group engineer, S. H. Logue. To asst. research group engineer, J. H. Kluck.

Dept. 97-1, Data Processing: To tabulating supervisor, C. D. Jeanes.

Dept. 292-7, Manufacturing Control: To M/C asst. supervisor, D. K. Campbell.

Dept. 603-7, Tool Manufacturing: To asst. foreman, R. A. Lea.

Personals

SAN DIEGO

I would like to express my gratitude to the Convair friends for the many expressions of sympathy at the loss of my husband, Harry B. Flannagan, Dept. 31.

Mrs. Margaret Flannagan

* * *

To each and every person at Convair who so generously offered aid and sympathetic understanding during the illness and death of my husband, Fred Wade, Dept. 406, I offer my heartfelt thanks.

Mrs. Marie Wade

* * *

My daughters and I would like to express our deepest thanks to Convair people everywhere for their many acts of kindness, generosity and help at the passing of our father and husband, Hans. Your many kind deeds and acts will never be forgotten.

Mrs. H. R. Friedrich, Karin and Barbara

Retirements

SAN DIEGO

BELDEN—Olive E., Dept. 91. Seniority date March 20, 1951, retirement effective Jan. 23, 1959.

HIMES—A. G., Dept. 25-9. Seniority date Nov. 9, 1950, retirement effective May 29, 1957.

MILLER—H. L., Dept. 603. Seniority date Nov. 15, 1954, retirement effective Dec. 31, 1958.

SWOPE—Charles B., Dept. 98. Seniority date March 21, 1940, retirement effective Jan. 23, 1959.

Births

SAN DIEGO

BRIGHTWELL — Daughter, Nancy Lynn, 7 lbs., 14 oz., born Dec. 30 to Mr. and Mrs. Haskell W. Brightwell, Dept. 603. Mother, Mary Brightwell, on leave of absence from Dept. 204.

COSTELOW—Daughter, Jennifer Marguerite, 6 lbs., 14¾ oz., born Jan. 8 to Mr. and Mrs. Don Costelow, Dept. 25-4.

FEENEY—Daughter, Maureen Marie, 6 lbs., 11 oz., born Jan. 22 to Mr. and Mrs. Ed Feeney, manager of Davidson Brothers.

PETERSEN — Son, Randy Wright, 7 lbs., 8 oz., born Jan. 15 to Mr. and Mrs. Jack Petersen II, Dept. 403.

SWANSON—Son, Charles, 5 lbs., 3½ oz., born Jan. 13 to Mr. and Mrs. J. C. Swanson, Dept. 197-1.

Deaths

SAN DIEGO

ACKERMAN — Lloyd H., Dept. 180. Died Jan. 20. Survived by wife, Selma H.; two daughters, Mrs. Rhoda Rawson and Mrs. Marlys Darrock; one son, Roger Ackerman; four sisters, three grandchildren.

CASNER—Victor L., Dept. 14-4. Died Jan. 25. Survived by wife, Margaret; father, William Casner; brother, Floyd Casner; two sisters, Mrs. Esther Millar and Mrs. Wauneta Lauder.

MARKS—Frank V., Dept. 14-4. Died Jan. 23. Survived by wife, Irene; son, Anthony; brothers, Alfred and Tony Gonsalves; two sisters, Mrs. Mary Reilly and Lena Armenta.

OVERBEKE—John W., Dept. 6. Died Jan. 24. Survived by wife, Catharine A.; two sisters, Mrs. Lewis O. Riter of Cleveland, Mrs. Edith A. Copper of Baltimore.

PAYTON—Harold B., Dept. 8. Died Jan. 24. Survived by wife, Frances C.; mother, Mrs. Grace Payton, and sister, Mrs. Mary Mathews, both of Riverside.

SCHERF—Oscar T., Dept. 603-2. Died Jan. 27. Survived by wife, Anna Louise; two daughters, Mrs. Betty Carlson and Winnifred Below; and one son, Rudolph.

Button Winners to Meet at Gillespie

Annual button presentation to 1958 Fishing Club winners at Convair SD will be held Feb. 17, 7:30 p.m., in the new Gillespie Field Clubhouse.

Commissioner Dale Cromartie said a total of 43 fishermen and women are eligible for the awards. Top honors will go to R. G. Maler (Dept. 131-1) and Gertrude Cromartie (Dept. 102), each of whom won four buttons.

Only three-button winner is Max Guess (Dept. 192). Seven others tied for two-button awards. They are R. D. Marx (Dept. 8), Cromartie, C. J. Craft (Dept. 21), L. E. Small (Dept. 34-1), Oscar Tidd (Dept. 34-1), R. W. Menzie (Dept. 31) and R. H. Feeley (Dept. 34).

Ex-Pros to Hold Baseball Clinic

Baseball lovers from 8 to 80 will have an opportunity this month to pick up some professional tips and instruction at a clinic sponsored by the Convair SD CRA.

On hand to demonstrate phases of the game will be Pete Coscarart (SD Dept. 15), former National League star, and Cedric Durst (SD Dept. 3), ex-Yankee great and Padre manager.

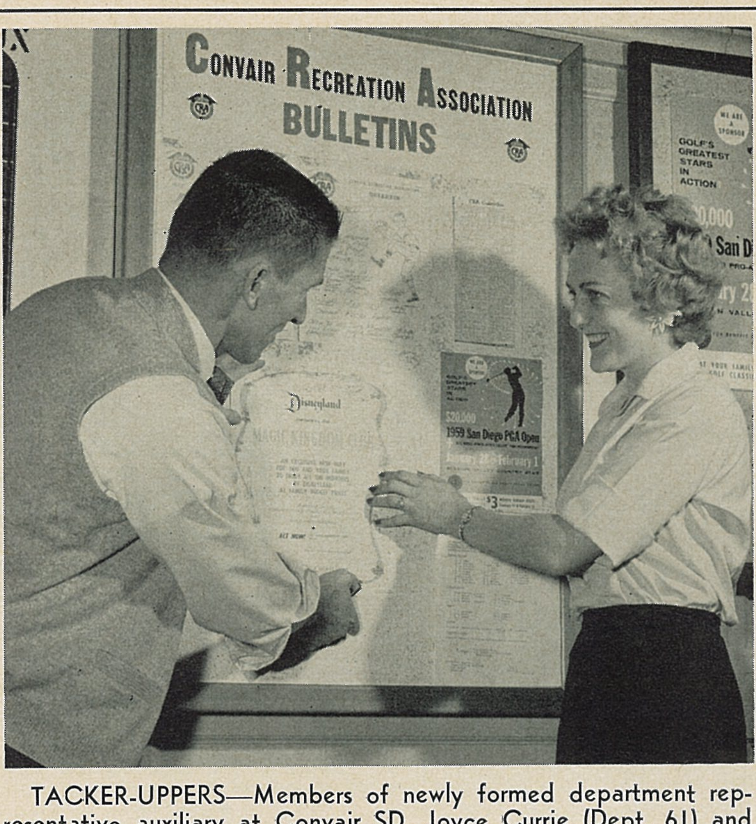
The clinic will start at 1 p.m., Feb. 15 at Pecan Park. Anyone interested—sandlot players, umpires, Pony and Little Leaguers—is welcome to attend.

NEW BOAT BUILDING NEARS COMPLETION

Completion of the new 50x100-ft. boat builders' workshop at Gillespie Field is expected early next month, Commissioner Dale Cromartie said. Only work remaining last week was raising roof and grading floor.

SD GROUND SCHOOL ENTRIES STILL OPEN

Some openings in the new ground school course which started at Convair SD last week still exist. The course prepares fledgling fliers for CAA pilot's exam. Prospective flyers should contact Rex Robinson, ext. 1636, Plant 1, for information.



TACKER-UPPERS—Members of newly formed department representative auxiliary at Convair SD, Joyce Currie (Dept. 61) and Harry Van Buren (Dept. 192) get into swing of new duties, one of which is keeping CRA bulletin boards up-to-date.

CRA Starts Auxiliary In All SD Departments

First meeting of departmental representatives, who will act as "go-betweens" for the Convair Recreation Association at SD and their respective departments, was held last week.

They will act as an auxiliary to the CRA Council, said J. K. Field, chief of employee services at SD. Their task will be to acquaint employees with all aspects of the CRA program, but particularly on a department level.

"By so doing we hope to increase further the range and effectiveness of the CRA program," Field said.

Main duties of the representatives (eventually there will be one in each department) will include organization of shop league teams, planning of departmental picnics, maintaining of CRA bulletin boards, and answering of all questions.

"Actually, this type of arrangement is a two-way street," Field said. "It will also help CRA keep in touch with the feelings and desires of participants, enabling us to better plan programs.

"It was this type of thinking and general response that moved us to concentrate on a permanent picnic area (Pecan Park) and do away with the annual circus at Del Mar," Field added.

In most cases, supervision is appointing the representatives. Those responsible for appointments should turn them in to the CRA office, ext. 1245, Plant 1.

Pete Beyrer of CRA is coordinating the activity.

Ice Skaters Plan Big Bear Outing

Next jaunt for members of the Convair SD Ice Skating Club to Big Bear is set for Feb. 21-22, Commissioner Bud Davies said last week.

The group will again stay at Paramount Lodge where all types of accommodations are available, Davies said. Departure time and other particulars will be announced at a later date.

Reservations can be made by calling Mary Shapazian, ext. 2484, Plant 1.

Badminton Play Starts Feb. 21

First full-scale badminton tourney of the year, Feb. 21-22, will be jointly sponsored by Convair San Diego and Astronautics.

Entries can be made by calling Tom Richardson, ext. 2780, Plant 1. Last day for entries is Feb. 13. Three classes, A, B, and C, are planned. Doubles events will most likely be held in classes B and C.

First Folk Dance Meeting Planned

Enough interest among Convair SD people in folk dancing has warranted an organizational meeting and dance Feb. 6, 7 p.m. at the CRA Clubhouse on Pacific Hwy.

Any people interested in this type of activity should make an effort to attend the first meeting. Survival of group depends upon sufficient participants.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY — Field shoot Feb. 8, Kearny Mesa range. Registration opens 9 a.m.

BADMINTON—Organized play and instruction, 7:30 p.m., Federal Bldg., Balboa Park.

BASEBALL — Clinic, 1 p.m., Feb. 15, Pecan Park.

BOWLING—Entry blanks for SD championships tourney available at employee services, Plants 1 and 2.

BRIDGE CLUB—Next SD session Feb. 17. Master point play at Feb. 12 Astro session, Barcelona Hotel, 4th & Juniper Sts., 7:30 p.m.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse.

FISHING CLUB—Annual button award presentations Feb. 17, 7:30 p.m., Gillespie Field Clubhouse.

FOLK DANCING — Organizational meeting Feb. 6, 7 p.m., CRA Clubhouse.

GUN CLUB—Free gun-handling demonstration by Herb Parsons, noon, Feb. 8, Gillespie Field.

MOVIES—Reduced-price movies each Friday night at Academy Theater, 3271 University Ave. Feb. 6—"Desk Set" and "The Wrong Man." Feb. 13—"Onion Head," and "Light in the Forest." Admission: adults, 25c; children 10c.

RADIO CLUB — Morse Code classes every Thursday, 6 p.m., at club headquarters, Harbor Drive. Meeting tomorrow, Feb. 5 at 7:30 p.m.

RIDING CLUB—Trail ride and buffet dinner Feb. 22, 9 a.m., Palomar Stables, Mission Valley.

ROLLER SKATING—Monthly skate night Monday (Feb. 16), Skateland, Front and G Sts., 6:30-9:30 p.m. Free tickets at employee services, Plants 1 and 2.

SPORTS CAR CLUB—Meeting tonight (Feb. 4), 7:30 p.m., Natural History Museum, Balboa Park. Drag races Feb. 15, 10 a.m., Paradise Mesa strip.

VOLLEYBALL — Organizational meeting tomorrow (Feb. 5), 5 p.m., CRA Clubhouse.

Seat of Pants Turnout Largest In SD History

Sports Car Clubbers and guests from Convair SD turned out 191 cars strong to make the Seat of Pants rally last week the largest event ever staged by the group.

Bob Dunn, Sports Car Club spokesman, said the only larger event staged by any club in San Diego is the annual Don Diego rally (250 cars), but added that many of its contestants drive down from Los Angeles.

Seat of Pants winners were Tom and Mary Kienholz, Bruce and Marge Polzine, Lew and Ethel Grant, Pedro Aperlo, and Bob and Ron Chillo.

Convair drivers added more laurels to their credit Jan. 25 at Del Mar when they snagged three "firsts" in the Ryan Slalom.

Winners were: under 1300 cc, Bob Dunn, driving an MG-TD; 1300-1500 cc, Clint Herndon, driving an MGA; and over 3,000 cc, Dick Elms, driving a Jaguar.

* * *

Annual drag race will be held at the Paradise Mesa strip Feb. 15 under joint sponsorship of the San Diego and Astronautics Sports Car Clubs.

Any Convair folk interested in racing their sports cars are invited to participate in the time trials which start at 10 a.m.

So far 27 trophies and dash plaques have been set aside for the event and more may be awarded depending on turnout. Cars will be paired off and elimination heats run.

Movies and slides of Sports Car Club activities will be shown at tonight's meeting in the Natural History Museum, Balboa Park, 7:30 p.m.

New Pistol Club Officers Elected

A new slate of officers for the Convair SD Pistol Club was elected at a meeting this month.

Taking office were B. L. Broadway (Dept. 603), president; Arley Utter (Dept. 129), vice president; Ralph Picard (Dept. 31), range officer; and Ash Bishop (Dept. 401), secretary and treasurer.

Broadway celebrated his nomination by again sweeping top honors in both events of a shoot Jan. 25. His scores of 292 and 283 won both the .22 pistol course and .22 short national match events.

In the former, other winners were Ralph Picard (Dept. 31), expert; Dorcas Utter (wife of Arley Utter), sharpshooter; and Harvey Ingalls (Dept. 6), marksman.

Placing second and third in the short national match event were Ash Bishop and Jim Halfacre (Dept. 277).

Old Globe Tickets On Sale Next Monday

Tickets to the next Old Globe Theater production will go on sale to Convair SD people next Monday, Feb. 9, at employee services, Plants 1 and 2.

Reduced prices to "Waltz of Toreador" will be two seats for the price of one, $1.75 or $2.25. Convair SD night will be March 8.

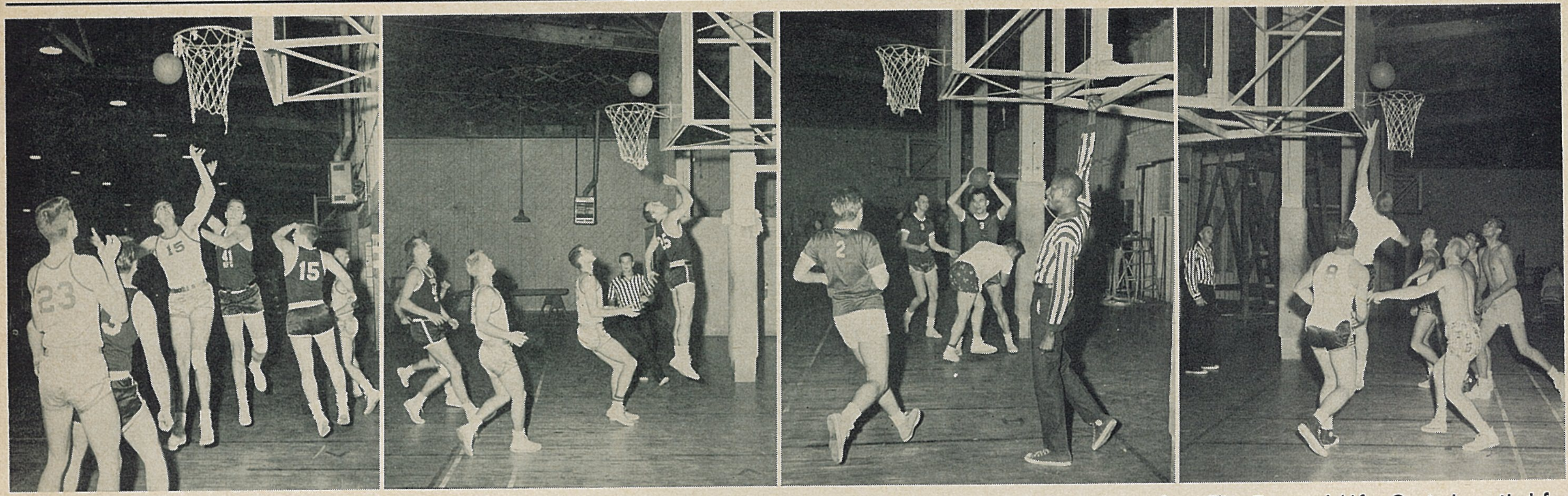
SD DELTA DIVERS HEAR MEDICAL TALK

Dr. D. G. Boyden of Underwater Demolition Unit One lectured and conducted a question and answer session at last week's meeting of the Convair SD Delta Divers. Commissioner Tom Richardson said an extremely large crowd was in attendance.

Berry Sweeps Top SD Tennis Honors

Tom Berry, seeded second, upset top-ranked Dick Collier last Saturday to nab the perpetual trophy tennis singles' title at Convair SD, 6-3, 6-1.

In a three-hour marathon for doubles' honors, Berry teamed with Dick Knox, surged from behind to edge Chet Dutton and Collier 5-7, 6-3 and 12-10.



ACTION-PACKED—Fast-braking stops and plenty of under-basket activity was caught by photographer last week at Municipal Gym, Balboa Park, where Convair SD shop and industrial league teams play. Flite Test and Mfg. Control are tied for the shop league lead.

CRA Sports & Recreation Convairiety



NOW YA SEE 'EM—And then you don't when Herb Parsons "smokes" five targets as fast as he can pull the trigger. Parsons is slated to give one of his free exhibitions, sponsored by the Gun Club, at noon, Feb. 8, at Gillespie Field.

Gun Club Sponsors Exhibition By 'America's Fastest Shot'

Convair SD and Astro gun enthusiasts and others who just like to watch a good show will have a chance to watch Herb Parsons, billed as America's fastest and most entertaining gun handler, put on a free public shooting exhibition at Gillespie Field, noon, Feb. 8.

This is Parsons' second visit to San Diego, Jack Swank, Gun Club commissioner said. "Four years ago he put on a spectacular exhibition that drew over 1,000 spectators and we're more than happy to sponsor another."

A self-taught wizard with a Winchester, Parsons has been shooting since the age of 8, and in his exhibition performs spectacular shots with an arsenal of twelve rifles and shotguns.

Parsons accompanies even his most difficult feats with a steady patter of comment.

Some of the feats he will perform with a .22 caliber rifle include throwing a 2¼-inch maple block into the air, cracking the block and splintering the pieces with four bullets in three seconds.

In another he ejects the empty .22 caliber cartridges into the air and uses them as targets for his bullets.

Afterwards, Parsons will conduct a question and answer session. Safety in the handling of firearms is as important to him as shooting and his whole program stresses firearm safety as well as marksmanship.

Meeting for Shop Volleyball Slated

An organizational meeting for volleyball players at Convair SD will be held in the CRA Clubhouse tomorrow (Feb. 5) at 5 p.m.

Shop league volleyball is scheduled to start week of March 15. During interim, individuals will be able to hold private practice sessions in Federal Bldg., Balboa Park every Wednesday night. Balls can be checked out at gym.

Players on winning and runner-up teams will be awarded individual trophies if enough participants enter league play.

Charm School Entries Open

Applications are now being taken at Convair SD employee services for a new charm school to start next month.

The six-week course, open to all Convair women, wives, and daughters, will run from March 18 through April 22, said Martha Woodberry, CRA commissioner of women's activities.

Sponsored by CRA, the course, which would cost $70 if taken privately, is offered Convair SD women at the nominal fee of $7, payable at registration.

Edith Antelline, who conducts her own charm school in La Jolla, will instruct the self-improvement classes. Points stressed will be good grooming, diet and nutrition, figure analysis, posture, business and social etiquette.

Two-hour classes, from 7-9 p.m., will be held in the House of Hospitality, Balboa Park each Wednesday.

Registration may be made at Plant 1 or Plant 2 employee services, and at Rose Canyon by calling Della, ext. 2036; or Dorothy, ext. 2239.

SD Hoop Play Swings Along In 4 Leagues

With two basketball teams perched on top of their respective leagues and shop league swinging along at fast clip, action aplenty is on tap for Convair SD hoop enthusiasts.

According to Basketball Commissioner Gil Crosthwaite, a small but loyal following has been attending league contests.

In shop league play, Flite Test (Dept. 6) and Manufacturing Control (Dept. 292) are tied for the league lead with records of 3 and 0. Flite Test beat Electrical (Dept. 6), 35-14, crushed 880 Wing, 56-21, and whipped Tooling (Dept. 603), 36-16.

Manufacturing Control victories were over Tooling, 28-24; Electrical, 43-29 and Plant Engineering (Dept. 25), 66-53, largest score run up by a shop league team.

What is shaping up to be the crucial game of the season will be played Feb. 6, 7:55 p.m. at Muni Gym, Balboa Park, when the two league leaders clash head-on.

In outside leagues, the Convair SD Girls' team retained their league lead with a resounding 61-22 triumph over Rohr to run their season play record to three straight. Manager Jean Todd announced the team has been invited to play in the Navy Invitational Tournament in March.

Industrial "A" league action saw the Convair SD Tool Manufacturing entry knock off the Astronautics Rockets for their third straight victory against no defeats.

A young, inexperienced Convair SD Eagles team entered in the tough City League has been knocked off for three losses, but indications are that they are learning fast and may yet throw a few scares into their opponents, according to Commissioner Crosthwaite.

Trail Outing Feb. 22 for SD Riders

One of the first big events of the Convair Riding Club for '59—a trail ride and buffet dinner—will start 9 a.m., Feb. 22, at the Polo Grounds, Palomar Stables, in Mission Valley.

C. L. Pogorel, Riding Club commissioner, urged participants to reserve horses in advance by contacting Champ Hough at the stables, CY-5-2529. Pogorel said a large turnout for the event is anticipated and suggested participants pay in advance because of limited number of horses available.

Regular Convair discount prices will hold. Inquiries should be directed to Vince Paul, ext. 2243, Plant 1, or L. Barbour, ext. 291, Plant 2.

CRA PLANS JUDO MEETING FEB. 11

Convair SD folk interested in judo are invited to attend an organizational meeting Wednesday, Feb. 11, 5 p.m., in the CRA Clubhouse.



FANS IN STANDS—Spectators, who turn out in goodly numbers for shop and industrial league basketball at Convair SD, register mixed emotions during spirited contest.

Convair Men in Key Positions For 13th Soaring Championship

Convair SD glider enthusiasts will play a major role in the 13th annual Pacific Coast Mid-Winter Soaring Championships at Torrey Pines Gliderport Feb. 21-22.

Ed Salkeld (Dept. 170) is meet chairman and John Gorman (Dept. 15-6) is project chairman. Ten other Convair men will be handling ground support jobs.

Sponsored by the San Diego Junior Chamber of Commerce and Associated Glider Clubs of America, the meet will last from 10 a.m. to 5 p.m., Saturday, and Sunday, noon to 4 p.m.

Events for the championships include altitude (for which Convair supplies trophy), duration, one- and two-place distance, bomb drop, aerobatics and spot landing.

Convair pilots entered in the competition include George Tweed of Astronautics flying a BG-7 and crew member Gene Whigham (SD Dept. 6). Whether or not last year's tourney runner-up D. J. "Duke" Mancuso of Convair SD, would enter the meet was unknown at press time. (If weather conditions permit, Mancuso may try to establish altitude and cross-country records on his own.)

Over 30 pilots are expected to compete for trophies and for the first time a special competition for planes of one type will be held. Officials expect ten Schweizer 1-26s to be entered.

Following Convair SD men are handling ground support tasks: Ted Sanford, scoring and rules; Bob Hanselman, communication equipment; Robert Stokely, ground vehicles; Ted Falk, soaring information booth; Sterling Starr, field operations; John Swinson, DeVaughn North, and Walt Mooney, tow pilots. Coordinating use of CRA Glider Club equipment are Gordon Olson and CRA Commissioner Jim Saftig.

163 GOLFERS PLAY IN RANCHO SWEEPS

Golfers from Convair SD turned out in full force Jan. 17 and 18 at Rancho Santa Fe when 163 linksmen participated in the first CRA-sponsored tourney of '59.

Top honors in the first flight (0-13 handicap) went to Stan Gmyr (Dept. 15) and Ralph Sing (Dept. 218) who posted gross scores of 77 and 78 respectively. Low net winners in the same group were John Parry and Richard Hansen (both SD Dept. 6).

Cecil White (Dept. 146) took low gross honors in the 14-19 handicap class. E. "Mac" McKensie (Dept. 600) and Frank Kelly (Dept. 6) tied for the runner-up spot. In a three-way deadlock for low net awards were Paul M. Castillo (Dept. 400), Eugene Collpeter (Dept. 31) and Grant W. Nygren (Dept. 232).

Third flight low gross winners were James Ryan (Dept. 6) and Jim Busby (Dept. 8) with scores of 87 and 92 respectively. Fred Rosas (Dept. 230) and George Greaves (Dept. 91) took first and second low net.

'Sleeping Beauty' Discount Offered

Holders of the Disneyland Magic Kingdom membership cards at Convair SD may see Walt Disney's latest production, "Sleeping Beauty," at reduced prices.

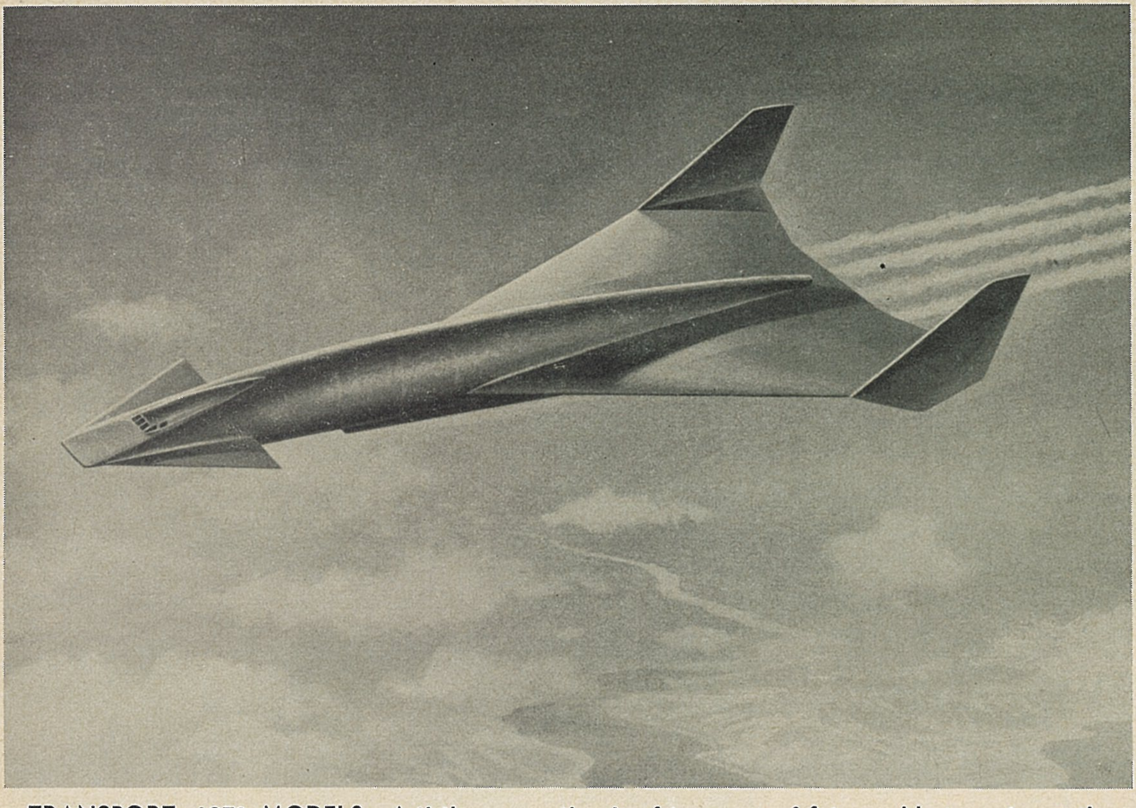
The film is now playing at the Fox Wilshire Theater, 8440 Wilshire Blvd., in Beverly Hills. Club members may receive a 10 per cent discount on any price ticket by presenting their Magic Kingdom cards at the box office.

Any Convair SD person may obtain the free membership cards at employee services at either plant. The cards are good for reduced prices at Disneyland.

Altitude Trophy Now Up-to-Date

Convair San Diego has contributed a spanking new altitude trophy for the 13th Annual Soaring Championship to replace model damaged in transit last year.

Damage was so severe it rendered trophy worthless and subsequently no award was made at last year's meet. The new trophy, about "desk high," was brought up-to-date with inscription Convair San Diego instead of Consolidated Vultee Aircraft. The trophy is awarded on a year-to-year basis.



TRANSPORT, 1970 MODEL?—Artist's conception is of transport of future, able to cruise at three to five times speed of sound at 60,000 feet or higher. It is one of hundreds of configurations considered by Convair in supersonic airplane studies.

Sebold Expects Airlines Will Buy Mach 3 to 5 Transports For 1970

A passenger airplane capable of flight at twice the speed of sound could be ordered into production today for delivery to airlines by 1965, but a Mach 2 airplane probably never will be built, delegates to the 27th annual meeting of the Institute of Aeronautical Sciences were told in New York City last week.

Instead, R. C. Sebold, vice president of engineering for Convair Division of General Dynamics Corporation, told the IAS symposium on aero/space technology, passenger transports flying three to five times the speed of sound and available in 1970 are a very much more likely prospect.

Sebold based his appraisal of "commercial air transportation beyond the subsonic jets" on factors which he said would make a Mach 2 commercial transport unattractive economically to airline operators. While exhaustive studies by Convair engineers have shown the Mach 2 transport to be competitive with all existing aircraft—"A certain money maker, a good airplane in every sense"—he said it does not appear probable "an airline would finance new Mach 2 equipment on the strength of a five-year advantage." Sebold reasoned that "by 1970, this airline would have to re-equip again to meet the competition of Mach 3 to 5 transports."

Sebold said these conclusions were based on evaluation with electronic computers of more than 100,000 supersonic aircraft design parameters. In addition, he said Convair has devoted more than 10,000 hours of wind tunnel testing to "the more promising of these various configurations."

The Mach 3 to 5 transport, Sebold said, should have an operational life of 15 to 20 years, or longer. "Thus it appears to us that the commercial market is too small to justify development costs for a Mach 2 transport."

More significant, Sebold said, will be the problems more directly related to the Mach 3 to 5 transport itself. Because of the sonic booms such aircraft would create as they crossed the nation, these Mach 3 to 5 transports will be required to fly at subsonic speeds below approximately 35,000 feet, national aeronautics and space agency studies have shown. Sebold labeled this or similar heights the "civilization altitude." Supersonic transport flight below the civilization altitude, he said, would subject populated areas to "public irritation and property damage."

Because these aircraft must climb up to and let down from the supersonic cruising altitudes at subsonic speeds, there is a practical limit to the advantages of high speeds. For example, he said, a transcontinental transport designed for cruising at seven times the speed of sound probably would never attain that speed in flight. "It would accelerate out to cruising speed only to find that it must immediately start deceleration to land at Los Angeles."

Sebold said that any airplane design that ignores this factor "would be in deep trouble." Yet this requirement means much extra fuel must be carried. Up to 15,000 pounds of extra fuel would be consumed in the climb and acceleration pattern, he said.



R. C. Sebold

Sebold said the "next step beyond the Mach 3 to 5 transport may be a ballistic transport." While he acknowledged that Convair has received "no serious inquiries about a commercial version of the Atlas (intercontinental ballistic missile) . . . nevertheless our Convair Lobber missile has demonstrated that ballistic resupply of troops is practical."

Sebold said that there probably will be "entirely different vehicles for different classes of trip length." He added that aircraft like the Convair 880, presently the world's fastest jet transport, was designed specifically for the short-to-medium ranges for which the Mach 3 to 5 transport is not suited.

In discussing the shape of the transports of the future, Sebold indicated the aircraft would not be radically different in external shape from today's advanced military aircraft.

But structurally, he said, they will be sharply different—because of the tremendous heat generated by aerodynamic friction on the aircraft's skin surfaces. Cooling the Mach 3 to 5 transport cabin interior by methods conventional today would require cabin walls a foot thick, or a gale of air blowing through the cabin area even if a source of cool air were available. The air surrounding such an airplane, however, would "simply be too hot at these Mach numbers," Sebold said.

One solution suggested has been to cool the cabin walls with circulating water, he said.



DEDICATED—Frank Pace Jr., president of General Dynamics Corporation, was a key speaker at dedication of San Diego industrial park on mesa near Astronautics Division plant last month. Pace (second from right) is shown with B. F. Coggan, SD Division manager and chairman of city's industrial development commission; Rear Adm. Charles Hartman and Mayor Charles Dail.

USAFE F-102s Go to Europe Via Flattop

First contingent of F-102s destined for overseas bases has landed in Europe.

Fourteen of the Convair-built jet interceptors (12 F-102As and two TF-102As) were unloaded from the U. S. Navy aircraft carrier "Croatan" at St. Nazaire, France, on Jan. 9.

The first F-102As will form the 525th Squadron commanded by Lt. Col. Raymond S. Brown based at Bitburg Air Base, Germany. The 525th is assigned to the 86th Fighter-Interceptor Wing headquartered at Ramstein, Germany. Other squadrons will be activated in the Netherlands and France.

The planes will be assigned to USAFE bases in Europe to bring to that continent the same interceptor defense capability that the United States now has. The F-102A is the first plane to be based in other parts of the world that can provide the speed, altitude, and armament comparable to interceptor fighter strength in the U. S., said O. W. Harper, chief of Convair SD interceptor service, who just returned from a two-week trip to the European area.

While there he joined in general discussions relating to activation of F-102A squadrons and their ground support at a USAFE weapons phasing group meeting at Weisbaden, Germany.

Air Force personnel stationed there "are extremely anxious to fly the F-102As and get them into service," commented Harper.

On hand to prepare the ground work for activation of the first F-102A squadron is a Convair SD field service team made up of C. H. Clements, field service supervisor, O. B. Johnson, J. C. Morris and G. S. Matthews. Convair SD spares representative is N. A. Picard.

C. J. Falkenthal of SD production flight left here last week for the European base to conduct ground school instruction for AF pilots who will be flying the F-102As.

Eventually there will be at least 30 San Diego field service men stationed in Europe.

Six From Convair Attend Conference

Six Convair representatives were among more than 350 military and industry leaders at the 38th Air Force-Aircraft Industry Conference recently in Palm Springs, Calif.

August C. Esenwein, Convair executive vice president, was among more than 20 industry and military key officials delivering presentations to go along with the "Teamwork" conference theme.

Other Convair people attending included Joseph J. Alkazin, SD manager of customer service; Howard R. Kennedy, SD chief of service publications; Charles S. Brandt, SD senior design group engineer; William F. Funk, FW design safety specialist; and Don D. Martin, technical representative, Norton AFB.

Ehricke Given Title Of Centaur Director

Krafft A. Ehricke has been relieved of his duties as assistant to the chief engineer at Convair Astronautics to become program director-Centaur, according to J. R. Dempsey, Astro manager.

In his new post Ehricke will have full responsibility for the Centaur program, development of an upper stage for a modified Atlas ICBM. He reports directly to Dempsey.

JOHNSON APPOINTED SUPPORT SUPERVISOR

W. W. Johnson has been named task supervisor in the Astronautics support planning and control section of product support department, according to J. P. Scheu, chief of support planning and control.



COLD OUTSIDE?—Preparing to get into long winter's session of testing is Carswell AFB B-58 Hustler pictured here at Eielson AFB in Alaska. Testing is part of "Operation: Raw Deal."



ALASKAN SNAPS—David F. Johnson, SD field service engineer on duty with F-106 undergoing cold tests at Eielson AFB, Alaska, sent home these candid snapshots. Trip north in C-97 included buffoonery (top photo, Carl Nelson of Hughes makes like Wyoming "Jackalope"—his home state) and poker. Third from top, offloading at White Horse, Canada. Third from bottom, F-106 at White Horse, awaiting takeoff. Second from bottom, barracks at Eielson at sunrise (10 a.m.) Christmas Day. Bottom, Woody Grassi tries hand at barbering, with advice from hecklers.



"Now let's cook up a good alibi and go home for supper."

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

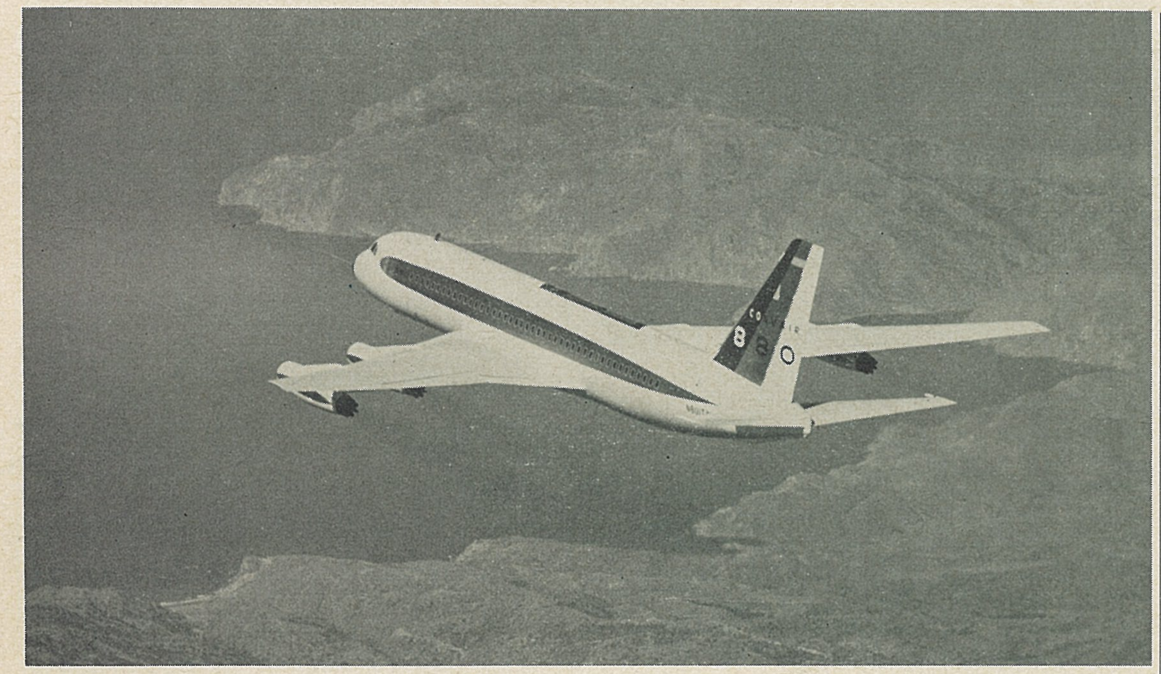
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SAN DIEGO, POMONA AND ANTELOPE VALLEY, CALIFORNIA — DAINGERFIELD AND FORT WORTH, TEXAS



COASTING—Graceful 880 cruises over coast on one of early flights before it was taken out of flight status to prepare plane for next test series.

880 Prepared For Next Flight Test Series

Convair SD's first jet transport has completed the first phase of its flight test program at least a week ahead of schedule, George E. Putness, chief of SD engineering flight test, announced last week.

The first 880 is now at field operations at Convair SD Plant 1 being prepared for the next step in its testing. Flight operations were halted in order to get the plane ready for the next portion of the testing program due to start next week.

"We have already accomplished most of the flight test work programmed from the first flight (Jan. 27) to the middle of February," R. L. Runnalls, director of the 880 flight test program, said last week. "The plane performed so well that we are now much farther along in our testing than we had thought possible."

In the first two weeks of flight testing the giant ship flew smoothly throughout checks of aerodynamics, handling and stability, and gathering of data on basic systems, said Don Germeraad, chief engineering test pilot, who has been at the controls during all of the plane's flights.

"We feel that it is one of the cleanest prototype planes that Convair has ever built," said Germeraad. "So far we have not had a single engine squawk."

The sleek, four-engined jet piled up its first 10 hours in the air so fast from North Island Naval Air Station that it was able to return to Lindbergh Field in just a week, on the afternoon of Feb. 3, at least a week sooner than planned. Germeraad and P. M. Prophett, assistant chief engineer, flight test, who acted as co-pilot, received permission to return the plane to Lindbergh Field from R. J. Bowers, area supervisor for the Federal Aviation Agency.

On its fourth flight the 615 mph transport reached its fastest speed so far, 540 mph at an altitude of 30,000 feet — much sooner than scheduled in the test program.

Since its return "home" plane No. 1 has added two more flights to the five it made while based at North Island. Observers on the first flight from Lindbergh Field Feb. 5 were B. F. Coggan, SD Division manager and Convair vice president; Ralph Bayless, SD chief engineer; B. J. Simons, senior project engineer for the 880; and Kenneth Ward of the 880 engineering project office.

"It is a wonderful plane," said Coggan after his two-hour flight. All of the engineering officials praised the plane's performance and the low noise level.

John Knebel, SD test pilot who will pilot the second 880 to go into flight testing early in April, made his first trip on the flight as co-pilot.

(Continued on Page 2)

Dynamics 'Task Force' Attacks ASW Problem

Details of a unique, company-wide task force created within General Dynamics Corporation to deal with the growing problems of anti-submarine warfare were revealed this week by Frank Pace Jr., Dynamics president.

The program has been under way since 1957 when an ASW planning and coordinating committee was formed under the chairmanship of L. B. Richardson, senior vice president-engineering.

Actively engaged in air, undersea and surface aspects have been Convair, Electric Boat and Stromberg-Carlson Divisions and Canadair Ltd.

"The increasing threat of the Russian submarine force dictates that every relevant resource among the free countries be marshalled against it," Pace said.

At a Navy-General Dynamics press conference in Rochester, N. Y. this week Richardson commented on a recent report that no weapon system now in existence, even on an experimental basis, offers an adequate defense to the deep-running (nuclear) submarine.

"We of General Dynamics have a special appreciation of this danger because our Electric Boat Division is pioneering in the design and construction of quiet, deep-running subs. But, by the same token, we are convinced that our intimate knowledge of this new weapon gives us an advantage in finding a defense for it."

Convair's representatives on the ASW committee include R. C. Sebold, vice president-engineering, and Charles D. Perrine, Convair Pomona assistant division manager-engineering. Committee staff executive is James G. Wenzel, Convair SD ASW projects coordinator, **(Convairiety,** Oct. 15, 1958).

Important ASW work was briefed in this fashion:

Electric Boat: "Tullibee," nation's first true anti-submarine submarine, now under construction. Study completed under Navy contract analyzes submarine's role in ASW.

Stromberg-Carlson: A new sonar test tank, largest and best equipped indoor facility of its kind in the free world, now in operation. High powered underwater transducers have been developed for use in a new highly classified sonar (underwater detection) system. Airborne radio receiver being designed as important unit in new sonobuoy systems. Other projects: ship-

(Continued on Page 2)

Lobber Completes Evaluation Firing

Convair's Lobber, ballistic cargo missile that can deliver emergency supplies to front-line troops, has successfully completed its first evaluation firings at Redstone Arsenal in Huntsville, Ala.

Sixteen missiles were fired for Army observers. Preliminary firing tests were made at the Army's Yuma (Ariz.) Test Station.

Accuracy of the Lobber is based on pre-spinning it as it leaves the launcher, which enables it to follow a true ballistic course.



HEAD-ON—Feathery trails from 880's four jets make a pattern behind during one of its seven flights (totaling 15 hours) completed thus far.

F-108 Wing Team at SD Established at Plant 2

Organization and relocation of the project team which will guide the F-108 wing program at Convair SD is nearing completion, according to W. S. Stroud, project manager.

All personnel involved in the planning, engineering, and manufacture of the F-108 wing for North American Aviation's trisonic interceptor will be geographically located at Plant 2.

"Due to the nature of this program and in the interest of meeting a very tight schedule, we feel that it is important to centralize and consolidate all necessary functions of the project," explained Stroud.

Engineers and tooling personnel will be located on the second floor of Bldg. 4. Offices of Stroud and his administrative staff will be on the first floor, as will offices of the four resident North American representatives, Frank Kember, William Franklin, Earl Larsen, and Charles Nunley.

The project staff is expected to be established in its permanent locations by the end of February.

First group of engineers, 33 Convair men who have been working at the North American plant, have returned to SD Plant 2 to form the nucleus of the group which will increase to about 100 as the program develops.

Under Convair SD's multimillion-dollar contract with North American it will be building wings for the Air Force long-range interceptor which has a combat ceiling of over 60,000 feet and combat range of at least 1000 miles.

According to the Feb. 6 North American "Skywriter," highlights of the F-108 brought out at a recent Senate Armed Services Committee hearing were "its clean aerodynamic design, its two engines, its construction of stainless steel rather than aluminum, its ability to carry guided missiles with nuclear warheads . . . it is manned by a two-man crew."

More Than 15,000 Attend Training Courses at SD

Over 15,000 Convair SD people took some type of training in more than 1,000 classes sponsored by SD educational services section during the last year.

A total of 354,952 manhours were spent in the classroom, either in-plant or on off-company time, reported H. W. Rubottom, chief of educational services.

Facing the task of placing the F-106 interceptor in production, together with design, tooling, and construction of the first 880 jet transports, during the year 394 classes were held under the division's technical program.

"It early became apparent," explained Rubottom, "that additional knowledge and skills were required to accomplish the assigned tasks efficiently. In consequence, educational services personnel were called upon to assist management in meeting the complex problems of providing the necessary training."

Induction of 3,067 new employees and 850 engineering employees, together with 30 summer employees, was done under the orientation program.

Management program saw 3,509 supervisory personnel taking advantage of advanced education classes offered under factory and engineering management development, and the Convair-Cal. Western University program.

Salute to Engineers' Vital Role Seen in Week-Long Observance

More than 8,000 members of San Diego's engineering community (a large percentage of whom are with Convair) are set to participate in a nation-wide observance of National Engineer's Week which opens Friday (Feb. 20) and runs through March 1.

With a Space Age theme, the observance is calculated to bring to the public recognition of the vital functions of America's engineers in civil and defense economy. Sponsors are the National Society of Professional Engineers and 26 other engineering, scientific and technical societies.

J. R. Dempsey, Astronautics Division manager, is San Diego chairman. More than a score of Convair men have executive posts in the observance **(Convairiety,** Dec. 23, 1958).

Many events are slated during the period. Dr. Harold Urey, Nobel Prize winning University of California scientist, will speak at a teacher-student dinner set for Feb. 20 at the University of San Diego.

A panel of key men will discuss prospects of new fuels at an Energy Resources dinner Feb.

(Continued on Page 2)

Dynamics 'Task Force' Attacks ASW Problem

(Continued from Page 1)
borne mine-hunting sonar, research in non-acoustic detection, underwater target classification, etc.

Canadair Ltd.: Cl-28 "Argus" is now flying, latest ASW aircraft in production today, equipped with latest in sub-detection and attack equipment.

Convair: Both under Navy contract and separate company funding, ASW systems integration problem being attacked. Over half-million dollars expended on ASW seaplane design that won Bureau of Aeronautics competition in 1957. (Never built, lack of funds.) Under Navy contract Convair is giving careful consideration to ASW as a possible mission for nuclear-powered aircraft, due to almost unlimited range and endurance.

"Lobber" logistic missile system (designed and developed and prototypes built with company funds) offers many possible applications to ASW. Equipped with either nuclear or non-nuclear warhead, missile appears attractive for depth charge applications. Other applications include placement of sonobuoys, flares, etc.

For hydrodynamics research Convair has not only a hydrodynamics laboratory but only privately owned towing basin in U. S., ideally suited to research into surface and subsurface ASW components. Controlled tests have been conducted at speeds over 100 feet per second, equivalent to 300 knots full scale. Convair SD's large physics group is focusing attention on most severe problem of ASW—detection.

Feb. 27 Deadline On Scholarships

Convair SD and Astro sons and stepsons have until next Friday (Feb. 27) to apply for the annual Convair sons' scholarships.

One Astronautics and two San Diego scholarships will be given for study in the fields of engineering or allied sciences. Winners will have tuition and laboratory fees paid during a maximum of five college years and an additional $250 a year for expenses.

Any son or stepson of a Convair SD and Astronautics employee is eligible, providing the parent has worked for Convair for five or more years. Students must be graduating from high school this year, or have graduated within the last two years.

Those eligible will be notified by March 16. Winners will be announced about April 1.

Forms are available at high schools throughout the San Diego area and at Convair SD and Astro educational services offices.

Ralph Bayless Now Institute Fellow

Ralph L. Bayless, Convair SD chief engineer, has been named a fellow of the Institute of Aeronautical Sciences.


Ralph Bayless

Bayless, who has been with Convair since January, 1936, accepted the honor at the annual IAS Honors Night dinner last month in New York City.

One of the nation's leading aeronautical engineers, Bayless has figured in the design of as many basic types of aircraft as any engineer in the country. At the time of his appointment as SD chief engineer, in May of 1955, Gen. Joseph T. McNarney, then president of Convair, declared: "Bayless' contributions to the science of aeronautical engineering in the past 20 years have made him one of the outstanding men in his field."

APPRENTICES TAUGHT NUMERICAL CONTROL

Numerical control group of Convair SD tooling department (Dept. 600-2) has been increased by eight newly-trained people following the conclusion of the programmers' training course.

Out of 300 applicants, 20 students, including three apprentices, were accepted to take the training. All who were not incorporated into the group will be held in reserve to be used later as the need arises.

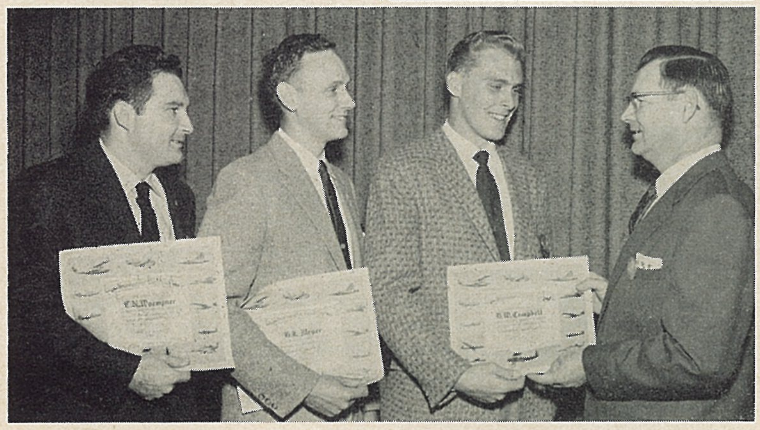
The first 8-week course to build up the new numerical control group at SD was taught by Harry Cooper and Robert Gregor.

Convair Daughter Gets Pageant Lead

A Convair daughter has been chosen to play the lead in the annual Ramona Pageant at Hemet this year.

Raquel Tejada, 18-year-old daughter of Josephine Tejada of Convair SD Dept. 192 and A. C. Tejada, Astronautics Dept. 595-5, competed with 10 others in tryouts for the part. A freshman at San Diego State College, Raquel is Fairest of the Fair, Miss Con-Tour, and Maid of California.

The 32nd showing of the pageant will be April 18-19, 25-26, and May 2-3.


PROGRAMMERS—O. W. Sweetland, Dept. 600 superintendent at Convair SD Plant 2, presents journeyman certificates to apprentices, Calvin Woempner, Herbert Meyer, and Buford Campbell, after their completion of first numerical control programming course.

★ Convairiety ★

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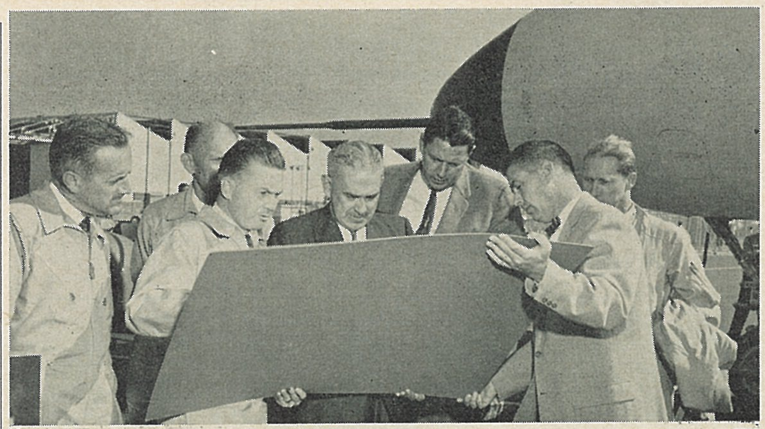
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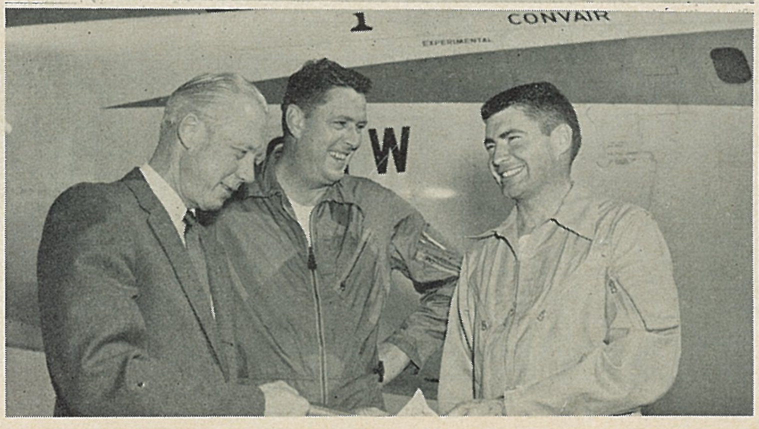
FW Editorial Offices, Col. 69C, mezz., ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; Bobbie Sue Marr, Horace A. Baker Jr.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.







880 MOVES ON—At top, J. V. Naish, Convair president, and B. F. Coggan, SD Division manager, look over flight data of 880 flight from Lindbergh Field on which Coggan and engineering officials were observers. From left to right, B. J. Simons, senior project engineer; Ralph Bayless, SD chief engineer; Coggan and Naish; P. M. Prophett, assistant chief engineer, flight test; L. R. McClain of flight test instrumentation; E. H. Davies, senior instrumentation engineer. Center photo, field operations and flight test crews who handled first 880 while it was based at North Island Naval Air Station. Bottom, R. J. Bowers, SD area supervisor for FAA, gives Prophett and Don Germeraad, co-pilot and pilot, permission to bring 880 back to Lindbergh Field.

SD Club to Present Mug of Year Tonight

Presentation of the top Management Club award—Mug of the Year — will highlight tonight's Convair SD club meeting in the Caribbean Room of El Cortez Hotel.

However, presentation of the President's Award has been postponed to a later date.

A special program addition will feature a talk on flight characteristics of the Convair 880 by Don Germeraad, chief engineering test pilot, and a movie of plane's maiden flight.

Guest speaker will be Donald C. Mitchell, National Management Association member, who will talk on "Creative Thinking." Social hour starts at 5:30 p.m., dinner 6:30 to 7:30.

Engineers' Salute Set For Next Week

(Continued from Page 1)
24 in the Balboa Park Club.

Other panel discussions and seminars will be presented by radio and TV stations Feb. 23-28.

In addition, many industries will hold open house, students will be invited to view Armed Forces facilities and ships. Civic groups will hear speeches on engineering subjects, and combined news media will stress the role of the engineer in today's world.

One feature event is an Engineering Exposition scheduled for the Electric Bldg., Balboa Park, Feb. 26 through March 1.

Sponsoring engineering, technical and scientific societies have mapped out a series of meetings for students interested in various fields of engineering.

880 Prepared For Next Test

(Continued from Page 1)
Plane No. 3, the second 880 to fly, will be delivered to field operations the first week in March. Plane No. 2 is undergoing an extended structural loading test program at the seaplane ramp.

The pressure cycle article (No. 99-4) is expected to go to the ramp this week for testing while plane No. 4, the first fully configured ship, is scheduled to go to flight test in early July.

Palmdale Facility Payroll Will Rise

As previously predicted, employment at Convair Palmdale facility is scheduled for a gradual upswing as F-106 activities move into higher gear.

According to facility manager W. J. Martin, it is anticipated that the present employment figure of about 1,230 will show a 300 to 500 increase during the next six months.

The increase will result primarily from recall of employees who were placed on lay-off status during the lull between the phase-out of F-102 activities and the build-up of the F-106.

Burt King to Head Electrical Society

C. Burt King Jr., senior electrical group engineer at Convair SD, was elected president of the Aircraft Electrical Society of San Diego Feb. 12 at a meeting in the IAS Bldg., 3380 N. Harbor Dr.

F-102A to Make Europe Debut At Air Show

(Pictures on Page 3)
Convair's F-102As are slated to make their first public bow in Europe this week.

B. F. Coggan, Convair SD Division manager and Convair vice president, will represent the company at the introduction of Convair jet interceptors at a press conference and air show at Bitburg Air Base, Germany, tomorrow (Feb. 19).

Arranged to present the F-102 and its weapon system to representatives of NATO countries, the one-day program will commemorate the arrival in Europe of the first F-102A and TF-102A delta-wing jets. The first F-102As are assigned to the 525th Fighter-Interceptor Squadron attached to USAFE's 86th Fighter-Interceptor Wing based at Bitburg.

About 150 military and press personnel from NATO countries and the AF are scheduled to hear Brig. Gen. B. O. Davis, deputy commander of operations, USAFE, describe the purpose of the F-102 in Europe as updating the AF capabilities and completely modernizing its air power. Tentative plans called for participation of Gen. Frank Everest, commander, USAFE Hdqtrs.

Coggan will brief the assembly on Convair's part in the development of the F-102A to meet AF requirements. John Rowe of Hughes' Aircraft Co. public relations, will explain the Falcon air-to-air missile which makes up the weapon system of the F-102. A. C. Welti of Convair SD public relations also will be attending the conference.

If weather permits, the F-102As will go through their paces in high-speed runs, take-offs, mass flybys, and landings.

2ND FLOOR, BLDG. 19 BEING REMODELED

Renovation of offices on the second floor of Bldg. 19 at Convair SD is due to be completed the first week in March.

The entire west half of the floor, occupied by customer service groups under J. J. Alkazin, manager, is being remodeled. Clearing space for construction work, L. J. Bordelon, chief of transport service, and 40 people of his section have taken up temporary quarters on the third floor of Bldg. 51.

The area in the southeast corner of the same floor is being reworked for General Office functions.

In the Bldg. 51 rehabilitation project the east half of the third floor is due to be released by the contractor this weekend. The large southwest area of the second floor will go into the works the first of next week.

Pace and Lanphier To Visit Moscow

Tom Lanphier Jr., Convair vice president, as head of the National Aeronautic Association, will lead a U.S. delegation to a meeting of the Federation Aeronautique Internationale May 28-31 in Moscow.

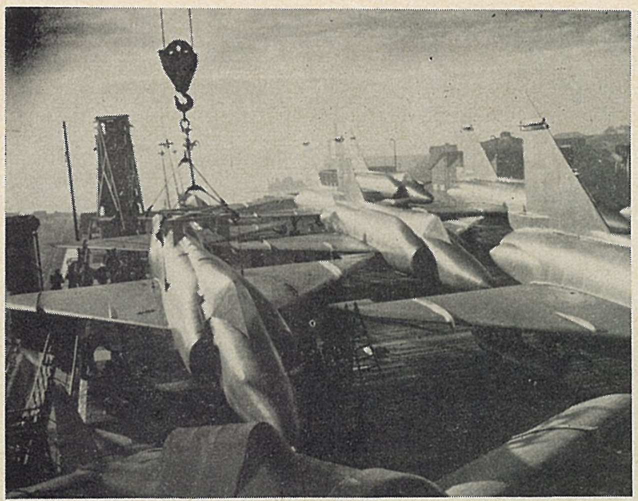
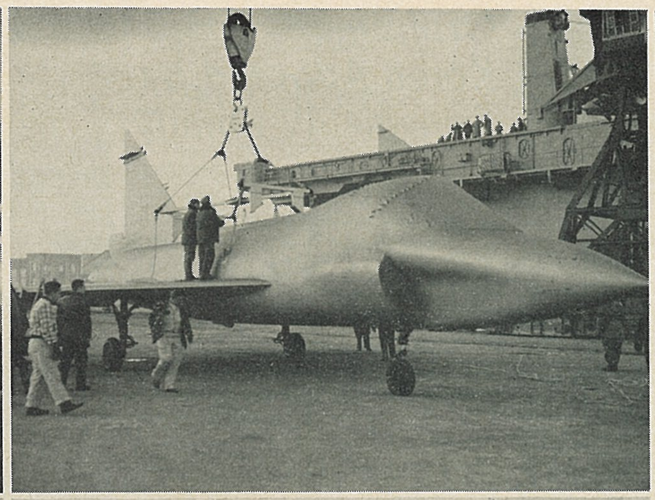
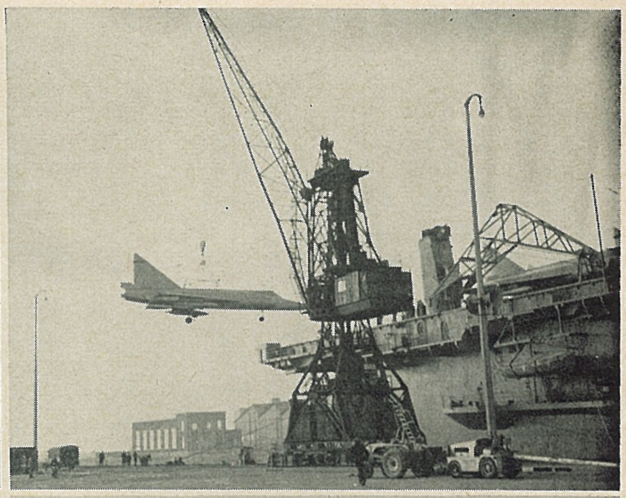
The delegation will include Frank Pace Jr., president of General Dynamics Corporation. Delegates will be received by Russian civil aviation authorities and a visit to a civil aircraft factory is on the agenda.

SD's Con-Trib-Club Makes $4,000 Gift

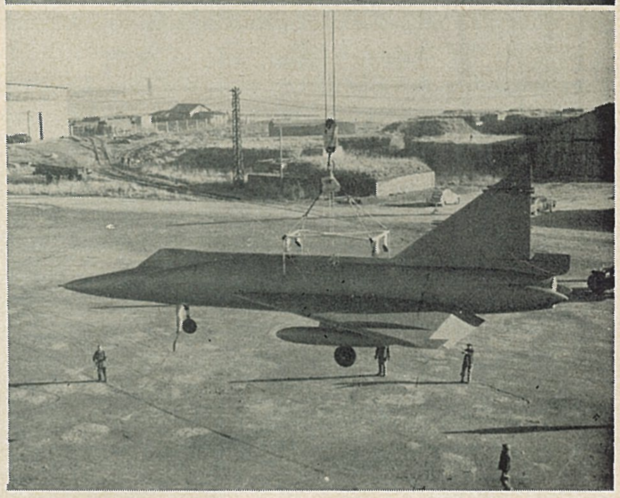
Convair SD contributors to the Con-Trib-Club may consider their Easter Seals paid for, Con-Trib-Club chairman, Keith Sears, said last week.

A $4,000 contribution by the club has been sent to the San Diego Society for Crippled Children for their '59 drive.

Likewise, Sears said, solicitors for the Cancer Crusade have been instructed not to contact homes displaying C-T-C window stickers.





F-102S REACH EUROPE—First Convair jet interceptors to be based on foreign soil were unloaded from Navy aircraft carrier "Croatan" at St. Nazaire, France, last month. At lower left, F-102As and TF-102A trainers are "decocooned" from protective covering at Sud Aviation hangar before being flown to Bitburg Air Base, Germany, where they will be attached to 525th Fighter-Interceptor Squadron of 86th F-I Wing of USAF Europe. Shown in lower center (left to right), Maj. B. H. Barton; Lt. Col. R. S. Brown, commander of 525th FIS; Col. C. M. Young, commander of 86th F-I Wing; and Maj. J. B. Anderson.

Scale Models Explain B-58 Ground Support

A scale model of the B-58 Hustler bomber, complete with scale model ground support equipment, is helping the Air Force in Washington this month to create a better understanding of today's sophisticated weapon systems.

It is the second year in a row for a Convair product to be chosen for this purpose. Last year it was the supersonic F-106 all-weather interceptor being produced at Convair San Diego.

Since it would be impossible to wheel a B-58 and its ground support equipment through the halls of Congress and the Pentagon, scale model displays created at Convair Fort Worth are being used by Air Force teams doing the job.

"This, in my opinion," said J. T. Cosby, B-58 program director, "is because Convair people at San Diego and Fort Worth are creating the most advanced weapon systems of our time. And it is an honor that we're tagged to help out."

To understand today's weapon systems, including their ground support equipment, takes only a quick look back into the history of aircraft.

"There was a time," Cosby explained, "when an airplane was almost wholly self-contained. It carried with it—in flight—almost everything it needed.

"When the pilot was ready to take off, a ground crew member swung the prop to start the engine—and that was it."

But today's sophisticated weapon systems are as different from that as a crystal radio differs from a 1959 TV.

To give the aircraft maximum speed, altitude, range, and target-hitting capability, everything not absolutely needed in flight is left on the ground, and that's ground support equipment.

Today's super-systems for bombing, navigation, reconnaissance and so on require testing before missions to make certain they're operating as they should. So ground test equipment is built to do the job.

"To check out such a system," says Cosby, "the test equipment must be 'smarter' than the system itself. Further, the test equipment must have built-in feedbacks so it can check on itself."

To broaden understanding of these new concepts in today's advanced weapon systems, Air Force teams are making presentations in the Department of Defense and before congressional committees.

For this purpose they use scale models.

The models were built by employees of FW Dept. 82, according to G. C. Gann, assistant foreman. Using the models, then, complete displays were created by employees in illustrations section, according to Johnie Herbert, supervisor.

The models, including some 18 different ground support items, were taken to Washington by O. N. Shivers, assistant project engineer.

They illustrate equipment used when the B-58 is on alert status, when it is given a periodic maintenance inspection, when a pod is being loaded, and when other necessary operations are being performed.

Tiny Airport Aids Customer 600 Briefings

First orientation course on the Convair 600, sister ship to the 880, will be presented to American Airlines the middle of next month.

A team of field service representatives will go to Tulsa, Okla., American's headquarters, to brief management personnel on the latest developments incorporated in the 600. First Convair 600 is expected to be delivered in June, 1961.

Glen Arner, Harry Addis, and John Nowak of customer service (Dept. 15-4) will be equipped with one of the group's latest visual aids, a large diorama realistically showing the 600 and 880 at a typical airport. Models and tiny figures, all made at the Convair SD plant, demonstrate the ground-servicing technique and turn-around capability of Convair's jet transports.

Customers will be shown graphically (with time recorded on a tower clock) how the streamlined servicing is designed to get planes off the ground in the minimum of time (25 minutes). All servicing is done from the right-hand side of the plane and all passenger loading and unloading from the left-hand side.

Twelve men in the field service group, supervised by R. K. Hall of transport service, have already taken comprehensive 880 information to TWA, Kansas City, Mo.; Delta Air Lines, Atlanta, Ga.; Capital Airlines, Washington, D. C.; and the Japanese Airlines at Tokyo, Japan.

Trips are being planned farther afield to bring the same data to customers in other parts of the world—Swissair and SAS in Europe; Real in Brazil and Transcontinental in Argentina by this fall.

At home, the courses have been given on a trial basis to Convair SD personnel in educational services, production flight, service parts, and provisioning customer representatives.

These condensed courses given to customer planning and management people at customers' headquarters are of about 12-hr. in length, or approximately a week's duration, explained Don Maxion, in charge of the customer training program.

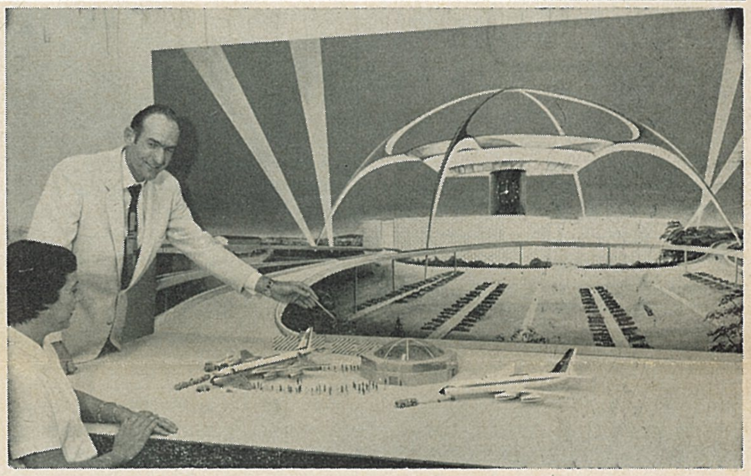
"We emphasize Convair's own special developments and unique designs, instead of dwelling on conventional features common to every aircraft," said Maxion.

For instance, Scotchweld bonding is explained in detail, and advantages of the integral fuel tanks, and, in the case of the 600, the General Electric CJ-805-21 engine which will provide higher thrust and lower noise level, and the anti-shock bodies on the wing to reduce drag from shock waves.

Orientation handbooks, visual aids, diagrams and drawings, and tape recordings are compiled in the SD section to supplement all lectures.

When the full-length maintenance training program starts for 880 customers this summer in the new training area in Bldg. 4, Plant 1, it will be a 240-hr. course extending over six weeks' time. Specialists from TWA will be arriving about mid-summer.

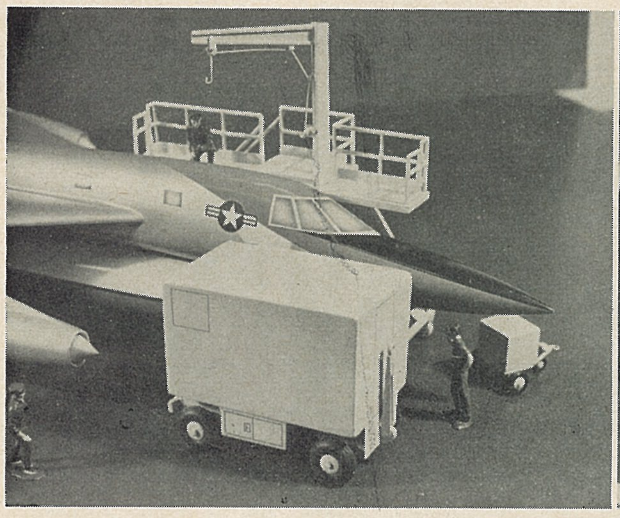
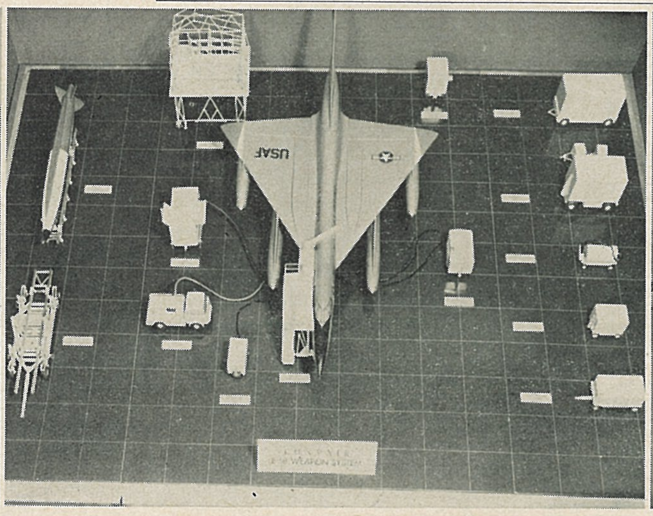
The program is set up as a part of the customer service department under L. J. Bordelon, chief of transport service.



DIORAMA—Glen Arner of Convair SD transport service points out to Mary Applegate ground-servicing advantages of Convair's new jet transports, 600 and 880, with realistic airport diorama used in customer training.

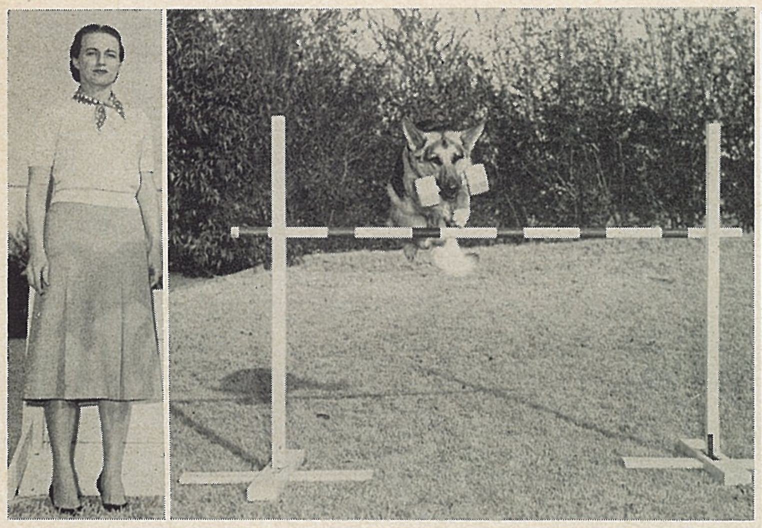
BENNER ASSIGNED TO ENGINEERING

P. M. Benner, chief of inspection at Convair SD Plant 2, now is assigned to SD engineering under Convair's executive development program.



PENTAGON ASSIGNMENT—These models of B-58 and ground support equipment have been helping USAF explain weapon system. In center is airplane with units normally needed for support. At left is bombing-navigation mobile test set. At right defensive electronic counter-measures system test set is in place.



FETCH, TIA!—Anna Stucker, wife of H. T. Stucker of Dept. 6-1, goes through a few obedience tricks with her 2½-year-old German police dog, Tia. They are preparing for an AKC show slated for March.

Seven From Convair FW Qualify For 'Expert Dog Handler' Title

Seven Convair Fort Worth people have been "in and out of the dog house" lately — and at the same time have remained on good terms with their better halves.

The seven are all dog trainers preparing for the American Kennel Club show in March.

These include C. H. Buse, Dept. 19-4; Ann Gillespie, daughter of Paul Gillespie of Dept. 6-2; J. M. Clark Jr., Dept. 6-1; Mrs. H. T. Stucker, whose husband works in Dept. 6-1; Rex Robinson, Dept. 22-4; R. E. Finch of Dept. 6-1; and Mrs. R. B. Morse, whose husband works in Dept. 22.

All seven trainers are members of the Fort Worth Obedience Club, an organization for dog handlers.

"One thing about the Fort Worth Obedience Club," Clark said, "is that you can't join until you have become a proficient handler."

Purpose is to train the handlers—not the dogs.

The club meets almost every Sunday afternoon at Dobson Kennels, south of Benbrook. Owner Dwight D. (Bill) Dobson Jr., who trains youngsters at the Children's Museum in the spring and fall, acts as instructor.

According to Mrs. Stucker, there are actually four degrees that the canines may work toward.

The first is recognized as the "companion dog" or CD degree. In order for a dog to fall in this category, he must be able to do a figure eight, stand for examination, sit for one minute, remain down for three minutes, recall, heel on and off and stop and sit down.

Second degree canines get the CDX or the companion dog excellent title. Here the dog does more advanced tricks off leash and drops on recall as well as retrieves a dumbbell. He also does high jumps, broad jumps, remains down five minutes and sits three minutes with his handler out of the room.

Dogs in the third or utility dog (UD) category must heel off leash, work with hand signals, perform directed jumping, be able to seek through scent distinction, etc.

The fourth degree is for the tracking dog.

Degrees are won at AKC shows. Dogs must compete and make a passing grade in three shows.

Digital Computer Specialists Meet

Ben Ferber of Convair SD's digital computing lab is presiding over a meeting of digital computing specialists in New York City this week (Feb. 17-20).

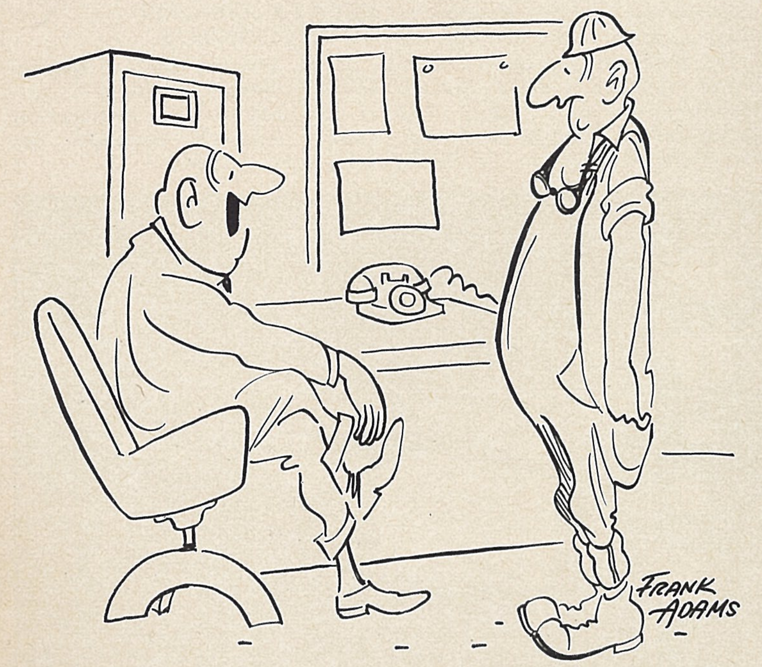
As president of the national SHARE organization, Ferber will conduct the convention sessions to be attended by approximately 300 people representing more than 100 computing centers. SHARE sets standards and pools working efforts so that computing groups can achieve the best use of certain IBM digital computers.

Also attending from Convair SD is Dr. C. J. Swift. Astronautics sent Dr. P. E. Lewis, T. R. Dines, and D. B. Parker. Two delegates each were to represent Convair Fort Worth and Electric Boat Division.

Convair Arranging Tours of 880 Line

Convair SD's field representatives are being progressively called home from their posts in various parts of the world to become familiar with the 880 and to help with the indoctrination of customers at home base before going back into the field again.

Besides their formal presentations, members of the training sections are often called on for lectures on specific phases of the 880 on behalf of other Convair departments. They also assist in plant tours for visiting groups and always have a big welcome sign out for anyone who wants to learn about Convair's latest product.



"When you got married and had six kids, I thought you had settled down . . . now what's this I hear about your needing more money?"

Orphan Boy From Korea Adopted by Convair AV Family

Although Korea and Antelope Valley are far apart in both distance and customs, a charming little 2½-year-old boy has bridged both gaps to make himself at home with a Convair family.

The distance was bridged by a 22-hour flight from Korea aboard a Northwest Orient Airlines plane, and the transition from life in a Korean orphanage to life in an Antelope Valley home was easily accomplished with the aid of a new father, mother, two sisters and a brother.

On hand to greet their newly-adopted son and brother when he landed at Los Angeles International Airport at 5 a.m. Jan. 15 were Mr. and Mrs. Bruce Sunde and their three children, Sally, 9; Sandy, 6; and Bruce, 3½. Sunde is in charge of special projects at Convair Palmdale facility.

The newcomer, whose Korean name, Duk Su-Lee, was changed



VISITOR—Mr. and Mrs. Bruce Sunde with newly-adopted son, Michael Benedict. "Ben" is making himself at home at Sunde's desk in Convair Palmdale, Dept. 324.

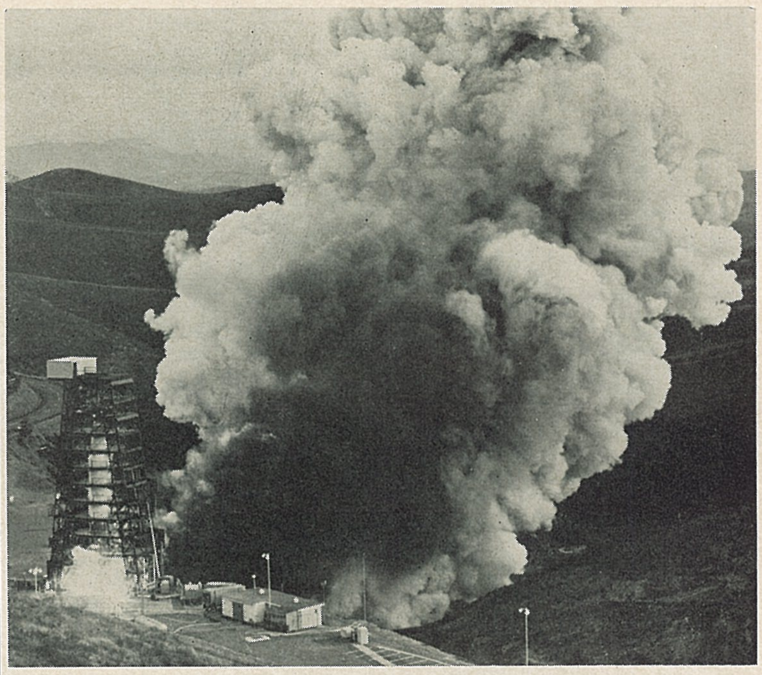
to Michael Benedict when he was christened at a Catholic orphanage in Po-Hang, Korea, has been nicknamed "Ben" by the Sundes. He is the child of an American father and Korean mother and has been cared for at the orphanage since he was six months old.

His adoption by the Sundes was arranged through the Catholic Welfare Bureau. Ben and 11 other orphans en route to new homes in the United States traveled as far as Seattle in the care of a Catholic nun. An airline official took Ben under his wing for the Seattle to Los Angeles flight.

Sunde describes his new son as a bright and cheerful child in good physical condition. The youngster has adapted himself readily to his new surroundings, enjoys American food, and in just a few days time had already picked up quite a number of American words such as "Hi," "Mama" and "Daddy." He is particularly adept at the good old American custom of shaking hands and saying, "How are you?"

Sally, Sandy and little Bruce (none are adopted) are proud of their new brother and find him very entertaining, Sunde stated.

Ben's arrival culminated a waiting period of two years during which the Sundes were seeking to adopt a Korean orphan. The expiration of the Refugee Law and the requirement for registration when the new law went into effect accounted for part of the delay, Sunde explained, and a further postponement resulted when a child previously selected became unavailable for adoption. The actual waiting time for Ben was just eight months from the time the Sundes were provided with a brochure describing and picturing the little boy.



CLOUD MAKING—Unusual weather conditions, plus an unusually long Atlas engine run (4 to 5 minutes) recently at Astronautics' Sycamore facility produced cloud that hovered overhead for long time.

University of California Extension Faculty Includes 25 San Diego and Astro Instructors

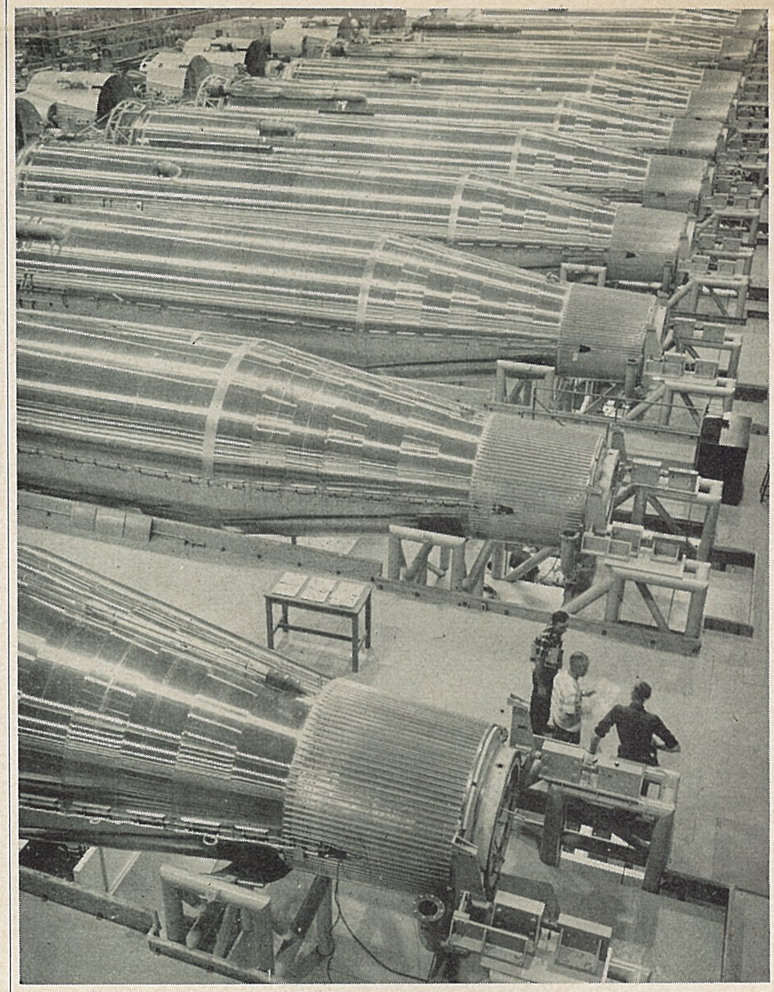
Twenty-five Convair San Diego and Astronautics engineers and mathematicians are included on the faculty of the University of California Extension's spring program.

From Astronautics are: Jack J. Block, training specialist; Carl G. Erickson, senior electronics engineer; Edward M. Getzoff, mechanical engineer; James J. Herman, senior electronics engineer; John E. Leib, senior dynamics engineer; Philip J. Swanson, group engineer; E. Ward Cheney Jr., senior research engineer; Allen A. Goldstein, design specialist; James F. Haskins, senior research engineer.

Also Ta Li, design specialist; Jack M. Maughmer, design specialist; K. Leon Montgomery, research engineer and P. Jerome Short, mathematician.

Convair SD instructors are: Harry G. Cooper, numerical control engineer; Glen M. Dodd, senior electronic engineer; Robert M. Kuhns, assistant flight test group engineer; Samuel A. Milliken, senior dynamics engineer; Ching H. Yang, senior dynamics engineer; Hideo Yoshihara, head, theoretical aerodynamics.

Also Lester Kraus, design specialist; Leo Lapidus, senior research engineer; James P. Mitchell, research engineer; Theodore Rubin, senior research engineer; Charles J. Swift, design specialist; David B. Medved, design specialist.



FIRST LOOK—First photograph of Atlas missile assembly line at Astronautics plant was released this month.



CONFEREES—Discussing some of sessions at recent 38th Air Force-Aircraft Industry Conference are, left to right, Joseph J. Alkazin, Howard R. Kennedy, both Convair San Diego; William F. Funk, Convair Fort Worth, and Charles S. Brandt, Convair SD.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.

Electric Boat of Groton, Conn., submarines.

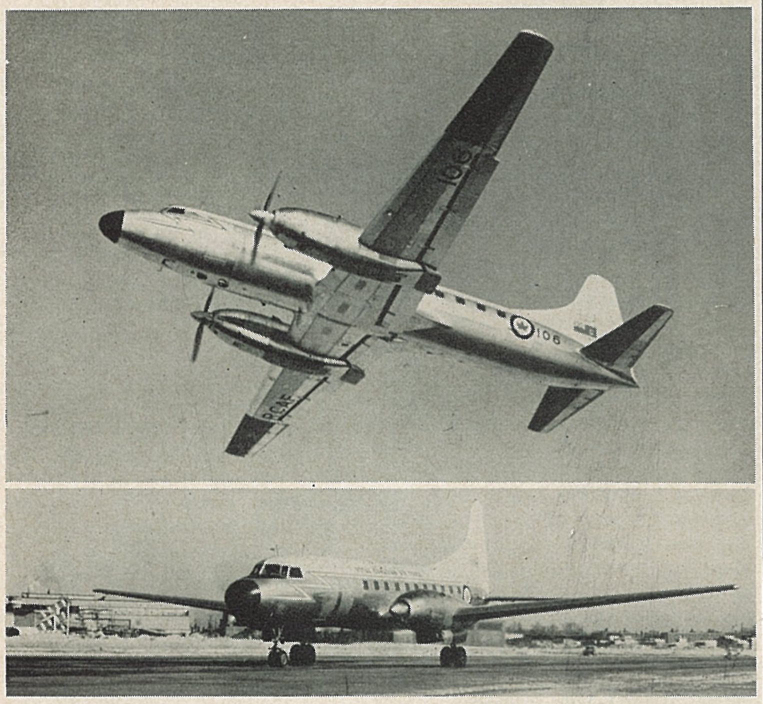
Stromberg-Carlson, of Rochester, N.Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N.J., electric motors, generators.

* * *



FIRST FLIGHT—Canadair's first pre-production 540 (a Convair 440 converted to turboprop power) flew Feb. 2 at Montreal.

BALL AND TICE GET ASSIGNMENT TO AID CANADAIR ON 540

SAN DIEGO—Two Convair SD men left last week for Montreal, Canada, to assist Convair's sister division, Canadair Ltd., in its turboprop program.

Homer Ball (Dept. 135) and Harvey Tice (Dept. 145) will be at the Canadair plant from three to six months to work with the people on the production floor during construction of parts for Canadair's new transports. Ball will assist in the fuselage section while Tice will be assigned to wing fabrication.

Both have had about 15 years experience at Convair SD in their own fields and were chosen as being especially qualified to help with the Canadair 540 and CL-44 program as it moved into production.

Only other Convair SD man now at Canadair is J. W. Dugan, engineering representative, who has been there since last April. John Ready, who assisted the engineering project office; E. L. Brown, quality control representative; and Ash Bishop, tooling representative, returned home before the first of the year after several months at the Canadian plant.

* * *

NEW WIND TUNNEL TO TEST RAMJETS

GROTON—A high speed wind tunnel is being built here by General Dynamics' Electric Boat Division to test ramjet engines for future aircraft and missiles.

Canadair Flies '540' Turboprop

MONTREAL—Canadair's first pre-production 540 flew for the first time here Feb. 2.

It was in the air for three hours on its maiden flight with William Longhurst, Canadair's chief experimental test pilot, at the controls. Takeoff run was less than 2,000 feet. All-up weight of 48,834 lbs. included full fuel tanks.

This airplane, a Convair model 440 converted to Napier Eland turboprops, will be delivered to the Royal Canadian Air Force on loan. The second converted plane is scheduled to fly next month and the third in April.

* * *

STROMBERG BACKS MUSIC BROADCASTS

ROCHESTER — Programs of recorded symphonic music broadcast over the Northeast FM Radio Network now are being sponsored twice weekly by Stromberg-Carlson Division, according to C. Kenneth Juno, advertising manager of the Special Products Division. The programs feature recordings by the Boston "Pops" Orchestra.

* * *

SALES APPOINTMENTS

ROCHESTER—Appointment of William T. Lucas as manager of navigation systems sales, and Eugene T. Mueller as manager of communications and sonar sales in the Electronics Division of Stromberg-Carlson has been announced.

Veterans' Hospital Acquires TRIGA For Medical Research

SAN DIEGO — The U. S. Veterans Administration Hospital at Omaha, Neb., has acquired a TRIGA reactor for use in medical research, Dr. Frederic de Hoffmann, general manager of General Atomic Division, announced.

Although General Dynamics' versatile and inherently safe TRIGA research reactors have been selected for use on five of the six continents, the TRIGA to be installed in Omaha will be the first to be used specifically for the advancement of medical research. The reactor will be a below-ground model with a nominal power level of 10 to 100-kilowatts. It will be installed in the basement of the 11-story, 486-bed hospital building.

The hospital is part of a medical center intimately involved in research, teaching and clinical practice, and serves as a teaching affiliate with the University of Nebraska and the Creighton Schools of Medicine. The hospital's Radioisotope Service is engaged in basic and clinical investigations of bio-medical problems. The TRIGA will be under the direct supervision of Dr. Richard Ogborn, chief, radioisotope service.

Astro Blood Credit Drops

For the first time since its inception, the Convair Astronautics blood bank program is faced with the prospects of going "in the red."

That's why an extra effort is being expended this week to get donors for a Feb. 26 blood bank planned at Astro. At that time the mobile unit of the San Diego Blood Bank will be on hand to accept volunteer donations.

"Increased employment, plus a higher than usual demand for blood and a small collection at the last bloodmobile visit has left our reserve at an extremely low point," said Joe Frivaldsky of employee services.

Since Astro established its own program, bloodmobile visits have been scheduled each quarter. An effort is made at each visit to collect 200 pints to carry over until the next visit. Due to colds, sickness, etc., the October visit produced only 115 pints.

A canvass is now under way in Bldgs. 1, 2 and 3 for prospective donors. However, donors from other areas will be accepted. Volunteers from other buildings are asked to contact employee services, ext. 1111 or 2379, for information.

Astronautics set up the blood program as a service to its employees. All blood collected is credited to Astro at the Blood Bank. It is available to employees and members of their immediate families without charge.

SD Blood Credit Deeply in Red

A call for at least 300 blood donors at Plant 2 is out to replenish the depleted blood credit of Convair SD.

First-shift employees at Plant 2 are being asked to sign now for the next visit of the San Diego Blood Bank's bloodmobile next month (March 5). Cards are in the hands of all supervisors and foremen throughout the plant.

The bloodmobile will be located in the center section of Plant 2's Bldg. 3 from 10 a.m. until 2 p.m. on the collection date.

Ken Wulfemeyer of employee services, in charge of the campaign, said that Convair SD's blood supply has been completely exhausted and will be at least 150 pints in arrears by the March 5 date. A good turnout of donors is needed to keep enough blood on hand for the 50 pints a month used by Convair employees.

Astro to Hear Pace Feb. 25

Convair Astronautics Management Club members will get the word from the "top" Feb. 25 when they hear Frank Pace Jr., president of General Dynamics Corporation, at an El Cortez Hotel meeting.

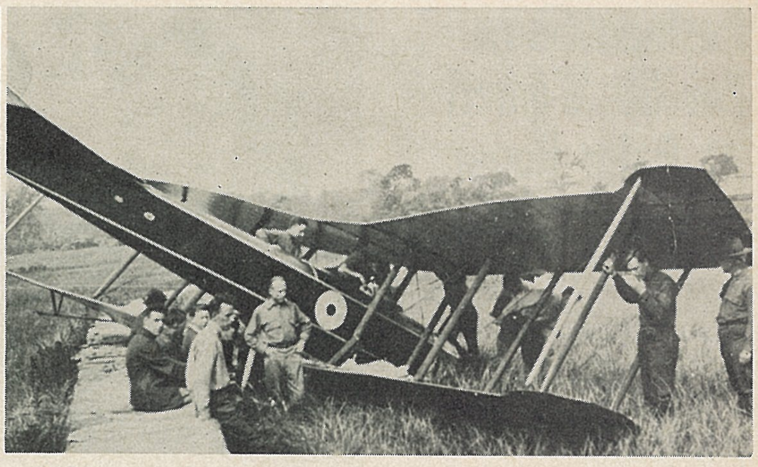
Also taking part in the management-studded program will be J. V. Naish, Convair president. Naish will present the 1958 President's Award, top honor paid annually for cost reduction at Astro.

A special invitation has been extended to ranking officials and board of management members of both Convair Division and General Dynamics Corporation to attend.

Industrial engineering is sponsoring the 6 p.m. (social hour) meeting in the Caribbean Room.

SECOND-SHIFTERS GET TV SHOW

First all-night television show in San Diego, pointed especially to second-shift workers, is being broadcast every Friday night and Saturday morning over Channel 6. Convair SD night owls now may see reruns of half-hour feature films from midnight to 6 a.m.



RECESS—Gallaudet Aviation School trainer is shown at end of a class session. Leo Bourdon, still with Convair, is at left, closest to camera. Below is launching of Gallaudet D-1 seaplane on Thames River, Norwich, Conn., in 1916.



Gallaudet Aircraft, a Convair 'Tributary,' Formed in 1917

(This is the second installment of a continuing history of Convair Division of General Dynamics Corporation. The first, in which the early aircraft development conducted by Edson F. Gallaudet was described, appeared Feb. 4.)

When the U.S. entered World War I, only five American firms had produced ten or more airplanes in their history.

However, when international developments made it clear that large military orders were in the wind, private capital began flowing into the industry. Edson Gallaudet's backing came from J. K. Robinson Jr., president of Ox Fibre Brush Co. of Maryland. The Gallaudet Aircraft Corp. was formed in January, 1917, with Robinson as president, J. G. Crawford, an Ox Fibre executive, as general manager, and Gallaudet as chairman of the board.

A new factory was ready in East Greenwich, R.I. in May of that year. One box car was sufficient to transport the firm's mobile assets from Norwich, Conn.!

Through the balance of that year the company worked on contracts for four Army and two Navy craft. Also in that year the Gallaudet Aviation School was conducted near East Greenwich. Among the students learning to fly was Leo Bourdon, Dept. 99 at San Diego. Bourdon has been with Convair and "tributary" firms for more than 30 years and is Convair's senior citizen in point of continuous service.

Gallaudet's manufacturing pace quickened in January, 1918, upon receipt of a Navy order for Curtiss HS-2 pontoon-equipped biplanes. Production had reached a plane a day when the war ended Nov. 11.

Gallaudet Aircraft's post-war story paralleled that of most other aircraft manufacturers. All looked in vain for a private market. Gallaudet brought out the "Chummy Flyabout," a two-seat sport machine, and the "Liberty Tourist," called the "last word in travel comfort, stability and beauty of outline."

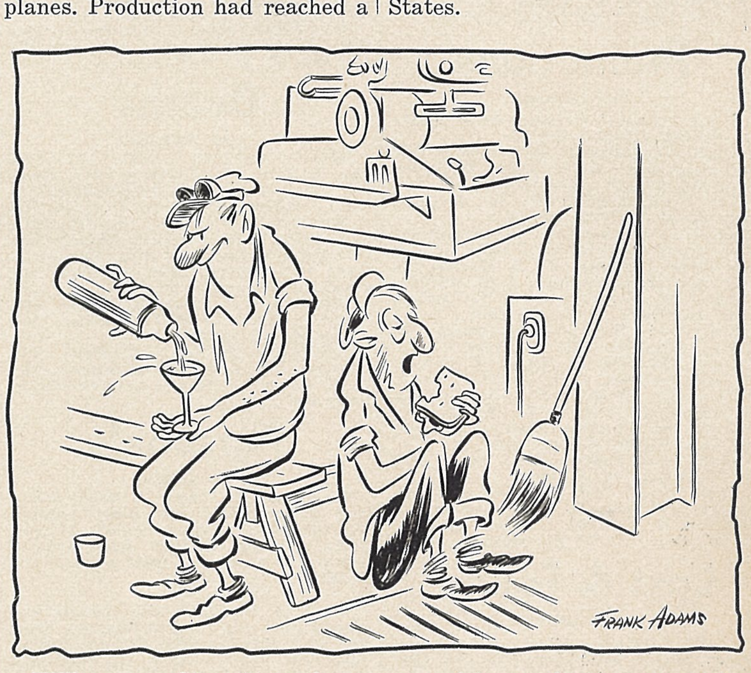
But buyers weren't there. Conversion work on thousands of DH-4 biplanes became the bone on which the industry gnawed. Gallaudet rebuilt four for the Air Service's first flying expedition to Alaska. The planes left Mitchell Field July 15, 1920, arrived at Nome Aug. 25, returned to a big welcome at Mitchell Oct. 25.

One of the company's most profitable contracts was conversion of DH-4s for postal service.

Richardson Named To Aircraft Board

Lawrence B. Richardson, General Dynamics Corporation senior vice president, was named to the 1959 board of directors of the Manufacturers Aircraft Association at its annual meeting last month.

The Association, composed of representatives of major aircraft companies, administers the patent cross-licensing agreement for the airplane industry in the United States.



"What was th' real simple way ta celebrate th' New Year that yer wife had figured out for ya?"

Fashion Show For SD Women At Palm Room

Tickets are now on sale for a spring fashion show arranged for Convair SD women through arrangements of CRA women's activities in conjunction with the Industrial Recreation Council.

Professional models will display the latest in spring styles Wednesday, March 11, at 8 p.m. in the Palm Room of the U. S. Grant Hotel.

Furnishing fashions, ranging from sportswear to formal dress, will be merchants of the San Diego Downtown Association. Dessert refreshments will be served and door prizes given out during the evening.

Tickets at $1 per person may be purchased at SD employee services, Plants 1 and 2; through Dorothy Kniffen at Rose Canyon, ext. 2239, and Bessie Cooper at parts sales on Fordham St., ext. 1000.

White Wins Award For Color Slide

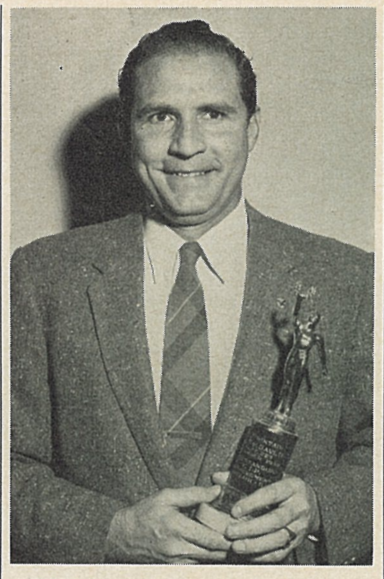
Edmund F. White's (SD Dept. 61) color slide entitled "Mountain Scene" won nomination as best color slide of the year at a SD Camera Club judging this month.

The club announced that the first quarterly contest for 1959 with both color and black and white categories will be held in conjunction with a meeting Feb. 23, 7:30 p.m., Photo Arts Bldg., Balboa Park.

Hoedowner Dance To Go Patriotic

Convair SD Hoedowners have been unable to schedule a dance on Lincoln's or Washington's birthday—but they have done the next best thing.

They will stay in keeping with the spirit when they hold a "Patriotic Promenade," a non-costume affair, Feb. 28, 8 p.m., American Legion Hall, 4061 Fairmount Ave.



HONORED — MacSave-it awards for October and November were awarded recently at Convair SD Management Club meeting to Everett Fountain, Dept. 223 (above), and R. H. Williams (Dept. 25). Combined CIP saving was in excess of $47,000.



First Judo Class To Start Feb. 25

A judo exhibition and beginners' class will begin Feb. 25.

It will start at 5 p.m. in the Federal Bldg. (north of main gym) in Balboa Park.

Dinner, Meeting, Time Trials, Planned by SD Sports Car Club

A potluck dinner and family night is planned by the Convair SD Sports Car Club Feb. 28, 7 p.m., at the Institute of Aeronautical Sciences Bldg., 3380 North Harbor Drive.

Food for buffet should be there by 6:30 p.m. Coffee and ice cream will be free in addition to games, prizes and movies. Entertainment for children will also be provided.

Reservations are being taken by Willa Isbell, CY-5-8272 and Ethel Grant, BE-3-0385.

* * *

Next club meeting will be held tonight (Feb. 18), Museum of Natural History, Balboa Park. Movies of the "Rally to the Stars" and the "Imports Unanimous Hill Climb" will be viewed.

In the latter event which was held Feb. 8 Convair participants drove away with some of the top awards.

Ranked second and third in the 1300-1500 cc class were Bill Zongker and Clint Herndon. In the same positions in the 1500-2000 cc class were Bob Turner and Bob Devereux. Skip Carpenter placed second in the over 3000 cc event and also posted best single run of day driving a Corvette.

* * *

On March 1 at Hourglass Field at 10 a.m. the club will conduct time trials under rules of California Sports Car Club.

Both foreign and sports cars are eligible for the trials.

Entries Extended For Charm School

There is still room for a few more Convair SD women in the new charm school which will start March 18 if they sign up immediately, said Martha Woodberry, CRA commissioner of women's activities.

The classes, which will run through April 22, are open to the first 50 women who submit their applications with the $7 per person fee.

Registration is being taken at either Plant 1 or Plant 2 employee services and at Rose Canyon by calling Dorothy, ext. 2239.

Edith Antelline, SD charm school director, who has conducted the six-week courses for Convair SD women for the last three years, will instruct the two-hour classes each Wednesday evening 7-9 p.m., in the House of Hospitality, Balboa Park.

SD Shooters Rank High in Tourney

Gunners from Convair San Diego, Astronautics and even a lone Convair Pomona guest demonstrated their skills at a shoot Feb. 1 at Gillespie Field.

Rifle, trap and skeet events were held. Tied for top rifle honors were Chet Sheppard of Pomona, Gerald Sherry and Joe Miller.

San Diego skeet winners were Wally Silver (Dept. 6) and Mary Stewart (wife of John Stewart, Dept. 34).

In the trap event four SD shooters won prizes. Scoring 25 straight hits each were Stephen Field (son of J. K. Field, Dept. 3) and Larry Frisbee (Dept. 3). George Clayton (Dept. 115) and Al Van Wormer (Dept. 230, retired) were other San Diego winners.

Bowmen to Discuss New Hunting Rules

Archers from Convair SD will discuss new state hunting proposals, the March trophy shoot, and lay groundwork for election of officers at the Feb. 19 meeting, 7:30 p.m. in the CRA Clubhouse.

Anyone interested in joining the club is invited to do so at the meeting, Al Phipps, club spokesman, said.

Phipps and fellow Convair SD archer, Harry Ross, attended the California Bowhunter and Field Archers convention in Fresno Feb. 7-8 as delegates of Southern Border Archery Association of which Convair is member.

SD Shooters Tie In Short National

Scoring 295 points, B. L. Broadway (Dept. 603) edged runner-up Joe Williamson (Dept. 401) to win the master class of a Convair SD pistol shoot Feb. 8.

But Williamson came back to tie for top honors with Ralph Picard (Dept. 31) in the center fire short national match course event. Both scored 255 points.

In the expert class Carl Hornburg (Dept. 166) squeaked past Carl Monds (Dept. 115) by one point for first place. Harvey Ingalls (Dept. 6) won the sharpshooter class and M. K. Barnett (Dept. 403) took the marksman award.

Photographers Attend Film Workshop in K.C.

R. R. Koser of the Convair SD motion picture section was in Kansas City, Mo., early this month to attend a motion picture production workshop given annually by the Calvin Co. Representing Astronautics were Mark Irwin, Paul De Mello, and Phil Neuhauser.

1,000 Brave Rain To See Gun Show

Approximately 1,000, undaunted by the rain, saw Herb Parsons — the wizard with a Winchester — put on a free shooting demonstration this month at Gillespie Field, Jack Swank, Gun Club commissioner, reported.

After the exhibition, Parsons presented the first of an annual series of awards for the most improved Convair SD Gun Club shooter to 12-year-old Stephen Field (son of J. K. Field, chief of SD employee services).

Coin Clubbers Plan Supper, Swap Night

Coin Clubbers at Convair SD have scheduled a potluck supper for the Feb. 25 meeting, starting at 6:30 p.m., in the Hearing Aid Society Bldg., 3843 Herbert St.

A coin-swapping night is scheduled to follow the supper.

Joe Miller, club spokesman, asked those attending to bring a hot dish or salad that will serve six to eight persons, and their own table service. Reservations should be made with Miller, ext. 2373, Plant 1. He invited any non-members interested to attend.

IAS Annual SD Dance Feb. 20 at Bali Hai

Convair SD members of the Institute of Aeronautical Sciences are reminded that today (Feb. 18) is the final date for making reservations for the annual mid-winter dance.

The IAS party will be held at the Bali Hai on Shelter Island Feb. 20.

Dance attendance is limited to the first 75 couples mailing reservations to IAS, 3380 N. Harbor Drive, SD (1). Dinner reservations may be made individually by calling AC-2-1181.

PIANO INSTRUCTION OFFERED SD BEGINNERS

Piano instruction for Convair SD beginners and intermediates is available as part of the adult education service of the San Diego City Schools, every Tuesday, 6:45-9:45 p.m. at Northwest Adult School in Pacific Beach, and Wednesday, 6:30-9:30 p.m. at the Marvin School in Allied Gardens. Instructor is Enrique A. Rivera (Dept. 600-6).

Medical Dept. Moves to New Quarters at SD

Medical department at Convair SD is now at home in new quarters on the remodeled lower floor of Bldg. 14, Plant 1.

In the renovation program involving Bldgs. 14 and 15, the whole first floor of Bldg. 14 has been turned over to Dr. F. M. Amaral, SD chief physician, and his staff. Educational services chief, H. W. Rubottom, and his personnel will move into the upper floor of Bldg. 15 this month, said D. C. Wilkens Jr., manager of SD industrial relations.

A new entrance at the south side of Bldg. 14 admits to a large reception room for new hires and employees taking physical examinations. Besides more adequate accommodations for men and women's examinations, separate rooms have been included for chest X-rays and hearing tests, said Dr. Amaral.

Offices have been provided for personnel of the aviation space medicine and radiation group, Dr. R. C. Armstrong, Dr. W. L. S. Wu, and Carol Purdy; industrial hygienist, Lou Beauchamp; and head nurse, Frances Collier. Laboratory and records rooms are located in the downstairs area.

The hospital clinic remains in its same location, lower floor of Bldg. 15.

The educational services library will be located on the upper floor of Bldg. 15. Access will be by means of the outside stairway at the east side of the building.

Classrooms will be expanded to occupy all of the upper floor of Bldg. 14. A ramp connects the educational services classroom area and administrative offices.

Con-Trib Finances Fifty Camperships To SD School Camps

A donation of $750 for 50 camperships to the San Diego City Schools camps this year and $450 for recreational equipment at the Warm Springs Camp in Antelope Valley was approved by the Convair SD Employees' Con-Trib-Club Committee.

The Hear Foundation will receive $500 for purchase of two portable calibrated tape recorders for conducting hearing tests on children.

Tentative approval was given for $300 to the Lake Hughes Recreation Assoc. for an amplifier record player; $4,000 to the Easter Seal campaign; $1,000 for the Senior Citizens' Lounge program; $7,500 to the American Cancer Society drive; $6,000 to the Guadalupe Clinic; and $3,000 to the Family Service Association.

Folk Dancers to Meet on Fridays

Folk dancing at Convair SD has been temporarily scheduled every Friday night starting at 7:30 p.m. in the CRA Clubhouse after 25 dancers attended an organizational meeting.

Dances are taught by Vernon Baillif (Dept. 215). Swiss, Swedish, Danish and American steps will be taught at the first sessions. Registration is not necessary for the classes which are open to all Convair SD employees and their families. If enough interest develops it will become a weekly CRA activity.

SD Club Sponsors Fourth Golf Meet

Convair SD Management Club's fourth annual golf tournament will be played Feb. 28 over the Bonita golf course.

Green fees have been reduced to $2.50. Starting times are from 7 a.m. to 11. Call Russ Davis, ext. 335, Plant 2, or Gerry Cox, ext. 468, Plant 1, for tee times. The club will donate prizes for the blind handicap.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Feb. 16 through Feb. 28:

Twenty-year: Dept. 31, R. W. Allen.

Fifteen-year: Dept. 3-7, L. E. Cook; Dept. 6-31, J. A. Howland Jr.; Dept. 21-2, J. L. Coopwood; Dept. 136, Granville Hardin; Dept. 188-3, Lela M. Brotherton; Dept. 216, Oveta T. King; Dept. 267, John Maroldo; Dept. 600-1, C. D. Hollis, M. E. Lamb; Dept. 603-7, P. H. Steckelberg.

Ten-year: Dept. 4-1, N. W. Bayne, Catherine W. Hinton; Dept. 5, E. H. Cook; Dept. 6-51, R. E. Baker; Dept. 14-4, J. K. Mackay; Dept. 15-4, R. H. Detwiler; Dept. 31, F. J. Bourgeois, F. R. Murillo.

Dept. 145, A. B. Hubbard; Dept. 171-0, G. O. Spencer; Dept. 188-3, Ruby H. Caine; Dept. 201, L. F. Smith; Dept. 216, Guadalupe Q. Fackrell; Dept. 218, M. I. M. Crist, Clifford Fields, Barbara G. Jackson.

Dept. 223-0, C. W. Levell; Dept. 233-0, H. S. Bishop; Dept. 292, P. R. Carlton Jr., L. A. Rodriguez; Dept. 400-1, L. R. Hance; Dept. 401, M. J. Rust; Dept. 600-1, A. J. Thurley, R. F. Winchester; Dept. 603-7, Ethel S. Morris.

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective Feb. 2:

Dept. 4-1, Material: To inventory control supervisor, M. Swinney. To inventory control asst. supervisor, W. R. Ambrose, E. B. Roberts. To rec. & stores asst. foreman, S. J. Bucaro.

Dept. 6, Engineering: To engineering adm. supervisor, E. W. Fowler Jr. To test group engineer, W. R. Holmes. To asst. test group engineer, J. S. Griffith.

Dept. 31, Experimental: To tooling asst. supervisor, L. D. Claussen.

Dept. 34-1, Material Procurement: To buying supervisor, M. A. Grove.

Dept. 216, Electric Bench & Fabric: To asst. foreman, D. L. Kimball.

Dept. 271, Model 8 Field Operations: To general foreman, J. R. Chapin.

Dept. 280, Proofing Mockup: To asst. foreman, W. H. Killingworth.

Dept. 400-1, Tooling, Plant 1: To tooling supervisor, T. B. Floyd.

Dept. 603-6, Tool Manufacturing: To general foreman, C. L. Thompson. To foreman, H. M. Prior. To asst. foreman, H. W. Coyle, J. W. Shortridge.

Lost & Found

SAN DIEGO

LOST — Man's yellow gold Bulova watch, stretch band, Feb. 1 at Col. C20, Bldg. 2, Plant 2. Reward offered for return to Joe Santora, Dept. 292-2, ext. 266, Plant 2.

Retirements

SAN DIEGO

BROWN—Schack C., Dept. 115. Seniority date Aug. 5, 1946, retirement effective Jan. 30, 1959.

KRUEGER—Kurt R., Dept. 123. Seniority date Dec. 31, 1929, retirement effective Jan. 30, 1959.

LADD—Carrie B., Dept. 216. Seniority date Dec. 20, 1950, retirement effective Jan. 5, 1959.

MOLLEUR—Armand J., Dept. 280. Seniority date April 30, 1947, retirement effective Jan. 30, 1959.

Births

SAN DIEGO

BARBER—Son, Christopher John, 6 lbs., 12½ oz., born Jan. 20 to Mr. and Mrs. Charles Barber, Dept. 406.

BEALS — Daughter, Jana Lynne, 8 lbs., 5 oz., born Jan. 31 to Mr. and Mrs. B. A. Beals, Dept. 15-7.

HAMILTON—Son, Wilbur, 6 lbs., 7 oz., born Feb. 8 to Mr. and Mrs. Willie Hamilton, Dept. 21-2.

JOHNSON—Daughter, Victoria Ann, 5 lbs., 7 oz., born Feb. 3 to Mr. and Mrs. T. E. Johnson, Dept. 190-1.

WULFEMEYER — Daughter, Susan Lynn, 9 lbs., 12 oz., born Feb. 3 to Mr. and Mrs. K. W. Wulfemeyer, Dept. 3-2.

Deaths

SAN DIEGO

HILL—Robert W., Dept. 115. Died Feb. 2. Survived by mother, Mrs. Sarah Hill, three sisters and three brothers.

RAY—Charles E., Dept. 25. Died Feb. 4. Survived by wife, Iva Lee; daughters, Mrs. Sybil Olsen and Mrs. Madge Henkel; parents, Mr. and Mrs. Charles S. Ray; two sisters, four brothers, two grandchildren.

REYNOLDS — Betty S., Dept. 600. Drowned Feb. 1 in boating mishap. Survivors include mother.

STUTTE — Norman D., Dept. 603. Drowned Feb. 1 in boating mishap. Survived by wife, Joyce; two daughters, Betty and Debbie.

Personals

SAN DIEGO

The family of Frank V. Marks gratefully acknowledges and deeply appreciates the many kind expressions of sympathy and the beautiful floral tributes sent at the passing of their husband and father.

* * *

We wish to thank the Convair employees who acted as pallbearers, those who sent such beautiful flowers, and all those who contributed to the fund sent at the time we lost our beloved husband and father, L. H. Ackerman.

Mrs. Selma Ackerman and family





GLIDING HIGH—Betty Ann Nelson, queen of 13th annual soaring championship Feb. 21-22 at Torrey Pines, poses with Convair SD meet co-chairmen, Ed Salkeld (left, Dept. 170) and John Gorman (Dept. 15-6). On right is Roger Turnpaugh, JCC representative. Above, John Swinson (SD parts sales) takes queen for glider ride.

Sunnyside School Expansion Planned

A private non-profit facility in which some Convair SD parents have an interest—the Sunnyside Residential School for handicapped children—is now under sponsorship of a new group, Sunnyside Guild Incorporated.

Robert Fefferman (SD Dept. 6), Guild treasurer, said separation from former sponsor, United Cerebral Palsy Foundation, will be effective this week.

He said the school is open to all handicapped children (not only cerebral palsy victims but also epilepsy, muscular dystrophy, etc.) and is mapping plans for expansion. Operating costs are paid by parents, Fefferman said, but contributions of both money and manpower are needed to improve the present facility at 1949 Sunnyside Ave. in El Cajon. More information can be obtained by calling Mrs. Haddox at the school, HI-4-3382.

Badminton Tourney Set for March 7-8

Dates for the first badminton tourney, jointly sponsored by Convair SD and Astronautics, have been reset for March 7 and 8, Tom Richardson, commissioner, said last week.

Inability to get the Federal Bldg. gym in Balboa Park on dates previously announced has forced the change, Richardson said. To compensate, entry deadline has been moved up to Feb. 20, he added.

Among Convair SD contestants in tourney will be Marten Mendez (Dept. 292-6) and Jim Poole (husband of Velma Sue Poole Dept. 15-3), both nationally-ranked players.

Three classes, A, B, and C, are planned with doubles scheduled for B and C. If entries warrant, a special event for ladies will be held. Richardson, ext. 2780, Plant 1, is taking entries.

Membership Cards For Riders Ready

Convair SD Riding Club membership cards for 1959 can now be obtained from Marc Beresford and C. L. Pogorel, co-commissioners. They are also available at employee services, Plant 1.

Pogorel announced the riders will leave the Palomar Stables in Mission Valley, 9 a.m., Sunday (Feb. 22) for a trail ride. A buffet dinner will follow.

On Feb. 8, Convair SD Riders were guests of the Flying Hills Ranch Riders for a breakfast ride and fun show.

Eagles Surprise City Hoopsters; Mfg. Wins Again

Convair San Diego basketball teams are riding higher than ever this week after knocking off all opponents in sight.

Biggest shocker of all took place in tough City league where last-place Convair Eagles got up off the floor after three straight losses to belt second-place Calewo team, 66-60. They continued their climb out of the league cellar later in the week when they startled Chollas Merchants, 73-62.

Convair's Tool Manufacturing entry in the Industrial "A" league continued to roll over opponents as they chalked up their fourth and fifth straight victories against no defeats. They were in undisputed first place at the league half-way mark.

Gil Crosthwaite, CRA basketball commissioner, said games have been marked by sharp floorwork and teamwork but singled out Al Alonzo, Bill Bullock and Dee Trepanier as leading playmakers.

Shop league action came into sharper focus when league leaders, Flite Test and Manufacturing Control, cracked head-on. Control won 40-33 to push Flite Test into second place. Moving into third was Dept. 6 Electrical with a record of 3 and 2.

The Convair Girls' team clipped last year's league winner, the Black and Blues, 64-49. In a close contest with T.O.T.s the score in the record book was a 48-44 decision against the local entry. But manager Jean Todd said game is under protest at present time because of rule infraction in which wrong T.O.T.s player was credited with fouls.

Crosthwaite Named To National Post

Gil Crosthwaite, veteran Convair SD CRA softball commissioner, has been appointed by the nationwide Amateur Softball Association as its representative and commissioner in San Diego County.

Crosthwaite replaces Ralph Duesbury of San Diego who served six years in that capacity. Crosthwaite will administer rules and decide eligibility disputes in San Diego amateur play.

The ASA schedules and conducts amateur softball nationally and internationally through a regional set-up of commissioners.

Rockhounds Camp At Walker's Ranch

Thirty-two Convair San Diego Rockhounds camped at Walker's Gold Rock Ranch near Yuma Jan. 31 and Feb. 1, Dan Whorton, commissioner, reported.

Rock specimens found by the group included agate, petrified palm and dumortierite. Col. E. W. Keirstead (ret.) presented a talk and showed slides of King Tut's jewelry at the Feb. 12 Rockhound meeting, Whorton said.



VISITING PROS—Mike Souchak and Billy Casper (center, left and right), two of top golfers on pro circuit, were guests at Convair Golf Club meeting Jan. 30. Getting some professional advice are Convair SD CRA Golf Commissioner Ken Wulfemeyer (left) and Art King, Astro Golf Club commissioner.

CRA Sports & Recreation Convairiety

SD Bowlers in Home Stretch, Driving For Season's Honors

Roughly three-fourths of the bowling season at Convair SD is now history and keglers are readying for the last-quarter dash to season team and individual honors.

The season-long trend in which nobody knows who's in first may continue in some leagues up to the final roll-off. Most leagues have been marked by a continuous re-shuffling in the top positions; in the minority are those where the conclusion is cut and dried.

Following is a three-quarter mark round-up of Convair SD day-shift play:

MIXED MASTERS—Pin Chips (won 16, lost 4) have been in and around top bracket all season. Pin Heads, at one time in first place, have skidded down to 12th. Slack has been taken up by Screwballs, Dreamers and Model Shop who stand best chance of overtaking leader.

Individual leaders are D. Stone, HIG, 245; P. Hayman, HIS, 631; HWG, Marilyn Louder and Helen Belland, 233; HWS, Marilyn Louder, 576. Third place Dreamers hold high team game and season honors with scores of 928 and 2532.

JET 700—League for most part is staying true to early-season form. Exception is surge upwards of Analoggers who have continued climb right into first place tie with Alleycats. Gee Whizzes and Gutter-Snipes are only one game behind leaders.

Scoring leaders before final dash are R. Kuphaldt, HMG, 233; M. Cornish, HMS, 626; Doris Scheib, HWG and HWS, 208, 561; HTG and series, Analoggers, 897, 243.

CRA ENGINEERING—Climbing into top rungs after slow starts are Tigers and El Bandidos, both of whom had at one time been ranked in the last four places of the 16-team league. Between these two teams, in second place, are the Dest'neers.

FLIGHT TEST 700—Early-season leaders continue to show their heels to the pack. Ringers, Lucky Strikes, and Mix Ups are ranked one-two-three and continue to increase lead over second-division teams.

First place Ringers hold HTG and HTS honors with scores of 967 and 2351. Other leaders are N. Reed, HIG, 256; G. Nichols, 640. Top woman bowler with both game and series high is Doris Schautteet, 238 and 608.

750 MIXERS—What for a while had been race between Five-Kans and Demons has been broken up by Phffts and Crocodiles. But with a six-game lead currently sported by the Demons the contenders will have to make their bids in a hurry for the top spot.

CONVAIR ENGINEERING — Pylonners are starting to pull away after battling with Prodders, Half-Astros and Has Beens for most of season. Bulge at present is seven games between first place Pylonners and second-place Prodders. If Pylonners open lead up a little more it may be impossible to catch them.

JET LINER 700 — League shows most surprising form-reversal of all. Rockets, who during early season were in last place, have surged past pack to first where they are presently three games ahead of second-place King Pins. Teams shoved into third and fourth place, but not out of contention, are Tornados and Glo-Worms.

In their upward climb Rockets grabbed HTG honors with 837. B. Penneman holds HIG and HIS, 221 and 604. Leading gals are Gloria Partlow, HWG, 198 and Clare Hamman, HWS, 529.

CONVAIR WHIRLAWAY — One time first place Lucky Five has slipped into fifth while Silver Jets streaked into top spot. In between are Christie's, Five-O-Twos and Confused Five, all very much in a position to overtake leader.

Season leaders thus far are J. Meller, HIS and HIG, 646, 257; Christie's, HTG and HTS, 1000, 2789; Catherine Hayman and Kay Turner (tie), HWG, 213; Kay Turner, HWS, 509.

TWILITE TRIO—Only three games apart are Two Plus One, Over Fifty, Gutter Rats and Bob's Boobs. C. Hostetler has snared both high game and series with scores of 256 and 665.



REHEARSAL—Reviewing selections for spring schedule of Choralaires are from left: Jo Anne Clifford (Dept. 6), Director W. A. Vogel, and Marie Daigneault (Dept. 98-6). Seated at piano is Choralaires' accompanist, Joseph Lo Duca (Dept. 600-6).

Six Fishermen At SD to Get Button Awards

Fishermen from Convair San Diego will wear a busy path to the awards platform Feb. 27 when trophies for the Southwest Anglers annual button presentation at Tri-Anglers Hall in Inglewood are passed out.

No less than six fishermen from SD will claim trophies for prize catches during the year.

Commissioner Dale Cromartie said it will be the largest representation the club has ever achieved. One of the winners, Harvey Sass (Dept. 32-4), will be entered in the record books with the largest white sea bass to date. His 58-lb. specimen supplants a 56-lb. record standing since 1949.

Sass will bring Convair SD representation on the permanent honor roll to three, joining local winners of previous years whose catch records of largest corbina and yellowtail still stand.

Other '59 winners and catches are: D. R. Bryson (Dept. 102), 31-lb. yellowtail; Walter Kaiser (Dept. 603), 210-lb. marlin; R. W. Menzie (Dept. 31), 4-lb., 12-oz. corbina; L. P. Smith (Dept. 267), 39-lb., 4-oz. albacore, and R. G. Maler (Dept. 131-1), two prizes, 12-lb., 10-oz. bonito and 12-lb., 7-oz. barracuda.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY—Meeting Feb. 19, 7:30 p.m., CRA Clubhouse.

ASTRONOMY — Meeting Feb. 20, 8 p.m., Gillespie Field.

BADMINTON—Entries open for plant-wide tourney March 7-8. Organized play and instruction 7:30 p.m., Tuesdays, Federal Bldg., Balboa Park. Call T. G. Richardson, ext. 2780, Plant 1, for entries.

BOWLING—Entry blanks for SD championship tourney available at employee services, Plants 1 and 2.

CAMERA CLUB—Meeting and quarterly contest Feb. 23, 7:30 p.m., Photo Arts Bldg., Balboa Park.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse.

COIN CLUB—Potluck supper and swap night Feb. 25, 6:30 p.m., Hearing Aid Society Bldg., 3843 Herbert St.

MOVIES—Reduced price movies each Friday night at Academy Theater, 3721 University Ave. Feb. 20—"The River's Edge" and "Autumn Leaves." Feb. 27—"The Sun Also Rises" and "Never Say Goodbye." Admission: adults, 25c; children, 10c.

RADIO CLUB — Morse Code classes every Thursday, 6 p.m., at club headquarters, Harbor Drive. Regular meeting tomorrow (Feb. 19), 7:30 p.m.

RIDING CLUB—Trail ride and buffet dinner Feb. 22, 9 a.m., Palomar Stables, Mission Valley.

SPORTS CAR CLUB — Meeting tonight (Feb. 18), 7:30 p.m., Museum of Natural History, Balboa Park. Dinner and family night Feb. 28, 7 p.m., Institute of Aeronautical Sciences Bldg., 3380 North Harbor Drive. Time Trials March 1, Hourglass Field, 10 a.m.

SQUARE DANCING — "Patriotic Promenade" dance Feb. 28, 8 p.m., American Legion Hall, 4061 Fairmount Ave.

Golf Entries Open For March Sweeps

The Convair SD CRA golf sweeps at Flying Hills Feb. 7-8 were called "on account of rain," Commissioner Ken Wulfemeyer reported.

Downpour was so severe the course was not opened for play Sunday, he said. Weather cooperating, CRA SD's next sweeps will be held March 7-8 at Bonita. Entries open Feb. 23, close March 4. Call ext. 1705, Plant 1.

Underground Facilities Give Atlas Base Look of Simplicity

Vandenberg Air Force Base, ballistic missile training center for the Air Force, and "home" to more than 400 Convair Astronautics employees, is somewhat like a nervous chameleon these days —ever changing.

A multi-million dollar construction and renovation program there brings about a new look almost daily. New homes, offices and work areas, new roads and an almost-complete landing strip are noticeable additions.

Astronautics personnel, members of Dept. 576 under W. F. Miller, VAFB manager, are also seeing constant changes. Their area recently received new graveled parking lots. Office buildings have been partitioned and otherwise improved.

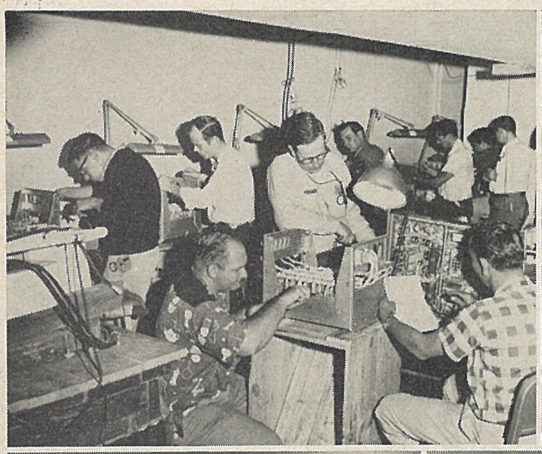
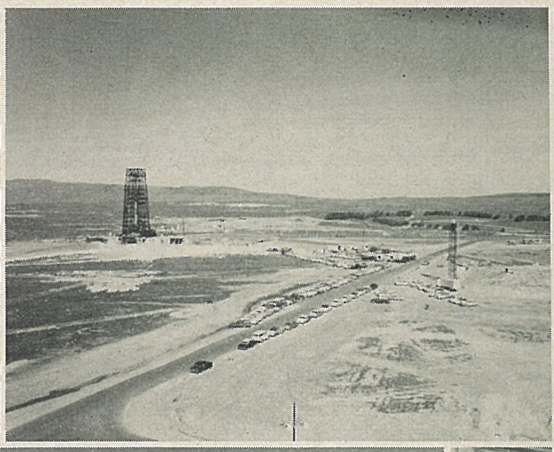
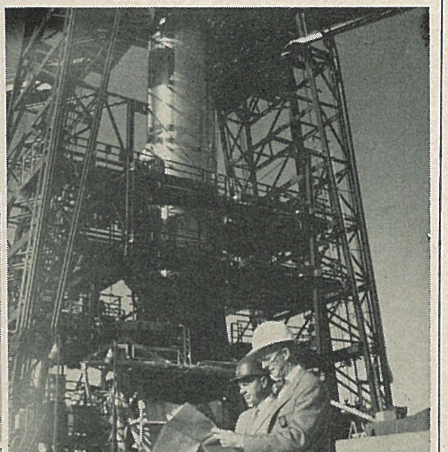
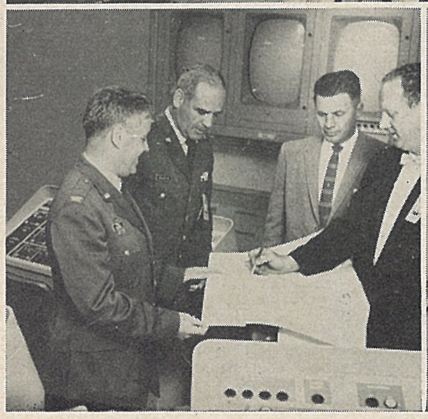
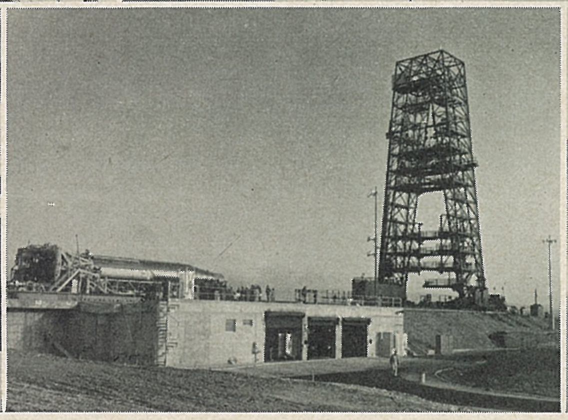
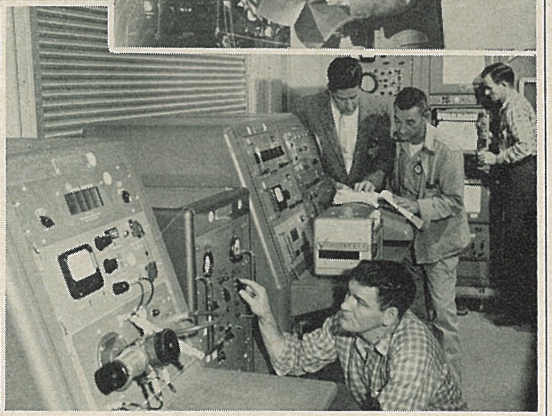
However, the "business end" of Vandenberg, the launching site for ballistic missiles like the Atlas ICBM, probably show the most advance.

A good example is the first launching site for the Atlas. It is called "Launch Complex 65-1" or simply "65-1" by Astro people. It is located on a sloping hilltop overlooking the Pacific Ocean some 300 miles north of San Diego. Across a wide valley is "Launch Complex 65-2," another Atlas facility under construction.

To the observer accustomed to the facilities at test base operations at the Atlantic Missile Range in Florida, Missile Static Test Site and even Sycamore Canyon in California, Vandenberg offers some startling contrasts. It appears to be a model of simplicity. Missing are the array of fuel tanks, support buildings and many other separate structures. At Vandenberg these are underground.

"65-1" consists of three launching sites (Pads A, B and C) set in a triangle and centered by a single blockhouse. Each pad is about 1,500 feet from its neighbor. A single set of instruments and controls in the blockhouse can be utilized for all three pads. Arm-like covered runways containing wiring and cables stretch from the blockhouse to each pad, going underground as they near the actual launch site. A single tower stands near the blockhouse to hold television cameras.

Each pad consists of a huge concrete platform, much longer than it is wide. Walking out on this ramp-like structure is much like moving along the flight deck of an aircraft carrier whose bow is anchored on land. Near the highest end is a gantry tower mounted on rails. Below it is the launch mechanism and below that a flame bucket leading to concreted canyons below. Underneath the platform is an unique "built-in" area. It contains rooms for offices, rest rooms, fuel tanks, instrumentation terminations, safety devices and storage. Steel doors seal off these areas at launch time. An elevator climbs up one side of the gantry tower. There are spaces for checkout trailers, floodlights, camera installations and other equipment outside. Over a nearby hill is a power station.

ATLAS TRAINER—Vandenberg AFB missile training center, home for 400 Astronautics folk, is developing rapidly. Top center, taken from atop gantry tower, shows bird in another tower, with blockhouse at right. Below, center, is tower up close, illustrating how fuel tanks, etc., are underground. At top right are G. A. Calvert, chief of product support, and W. F. Miller, Astro base manager at Vandenberg. Below left, Col. W. S. Rader, commanding 704th Strategic Missile Wing, and Col. J. J. Easton, commanding 576th Strategic Missile Squadron, are in blockhouse with Calvert and R. J. Meeker, principal field service engineer.

The blockhouse is also in contrast to similar equipment at other test bases. It, too, is simple (at least, by comparison).

"To better understand our facilities it is necessary to know the basic operational differences between this and other test bases," Miller said.

Other Astro-operated test facilities are geared to research and development. To get a clear picture of how each system and component functions requires elaborate instrumentation and recording devices. These are found both on the missile and launching facilities. And to check and recheck this equipment is a time-consuming project. As a result, countdowns are lengthy, often extending over many hours.

However, the end justifies the means, since by these development tests Convair is able to determine necessary changes in the missile and its support equipment. The ultimate goal is to present the Air Force with a "debugged" weapon system, one ready for action at all times.

"At Vandenberg we concentrate on the operational," Miller explained. "That is, we are installing facilities like those Air Force men will handle when they take over operational bases. We are presenting the Air Force with a proven system, one ready for instant use."

Toward this end, Vandenberg is contemplating countdowns in terms of minutes, not hours!

Another unusual aspect of Vandenberg operations calls for "one-of-three" programming. Here's how it works:

A complex, like 65-1, will have three Atlas missiles ready for firing. Countdowns started on one pad will be carried swiftly through to launch unless something happens. If there is evidence of malfunction, that countdown will halt immediately. Launch control will be swung to another pad and a second countdown started.

"Naturally, investigations will follow malfunctions. If major corrective work is needed, the missile will be removed and another erected in its place," Miller said.

"But our primary effort will be directed toward activating a facility that can be used to fire one or more missiles."

Vandenberg AFB is a ballistic missile training base responsible for bringing together and training future operational crews. At the same time it will help establish initial operational capabilities for the Atlas and all its support equipment.

Future Air Force missile crews have been training at Convair Astronautics for some time. In April the first major "graduation" occurs. Officers and technicians will emerge with a thorough training in individual systems and components. They then move to Vandenberg for further training. Called Integrated Weapons System Training, the program will weld together the individual skills of the men into compact crews.

All training of Air Force personnel is the responsibility of Astro's product support.

First Ground School For 880 Customers Given 'Dry Run' at SD

Production flight engineer-instructors at Convair SD are in the midst of a five-week "dry run" of the first ground school courses to be given to 880 customers.

The first week in March will see two courses starting simultaneously for FAA personnel and Convair flight people. The two-week FAA course will be given to 16 officials from Washington, D. C., Oklahoma City, and the Los Angeles regional office to familiarize them with the 880 jet transport. The second course will be five weeks for 30 pilots, flight engineers, and flight electronics engineers of SD production flight department.

TWA representatives will be here in June for the first customers course and Delta flight crews are scheduled to take the same ground school training this September.

A second course for TWA will run through August.

All production flight training is in charge of P. H. Selby, supervisor.

First Pilots Check Out In New Cockpit Trainer

First cockpit procedures trainer ever built for jet transport training has been installed at Convair SD and was ready to go into operation this week training future Convair 880 pilots.

The quarter-million dollar pilot aid, built by Burton-Rodgers, Inc., of Cincinnati, Ohio, has been set up in the customer training area on the first floor, Bldg. 4, in Plant 1. There Convair SD production flight pilots will be the first to use the trainer to learn first-hand the intricacies of 880 systems.

"This trainer is the best of its kind that we've ever seen," remarked W. B. Harwell, manager of SD production flight. "It will substantially reduce the amount of transition time which otherwise would be necessary for training in the airplane itself. It will cut from three to five hours from the 15-hr. period of actual flying normally necessary for checkout."

A. P. Wilson and W. D. Carrier, senior test pilots of production flight, will be the first SD pilots to step into the full-scale replica of an 880 cockpit for the 15 to 20-hr. training course. (Production flight engineer-instructors will be taught the operation methods by Burton-Rodgers' representatives so that they can carry on the training.)

Pilots will be able to do everything but fly. In every other way, the Burton-Rodgers trainer, built especially to Convair's specifications, duplicates the 880 cockpit. Instruments respond to operating controls exactly as in actual flight, explained P. H. Selby, production flight training supervisor.

Cockpit familiarization training will check out pilots in location and purpose of all switches and controls which operate 880 systems—power plant, fuel system, hydraulic system, air conditioning and pressurization, automatic pilot, electronics equipment, adverse weather and electrical systems.

Besides the three normal stations for pilot, co-pilot, and flight engineer, a fourth position is occupied by an instructor with a separate control panel. The instructor can test the students' alertness by throwing in various faults—"failure" of a section of the hydraulic system or a "fire" in a nacelle.

Thus, before actually flying a real 880, pilots and crews can learn to react as a unit in emergency situations.

Although maintained and operated by production flight department, the trainer will be available for training of other Convair SD groups—engineering flight test pilots, customer service representatives, and customer flight and ground crews.

Carl Lehmann, Burton-Rodgers project engineer, heads a team of Edward Bishop, Theodore Messer, and John Hutchings now at Convair SD to put the trainer into operation and instruct production flight men in its use.



TRAINER WELCOMED—Carl Lehmann, Burton-Rodgers, Inc., project engineer (far right), explains controls of the 880 cockpit procedures trainer to P. H. Selby, SD production flight training supervisor, and R. L. Mellison of SD purchasing upon its recent arrival at Convair SD.

Simpler Wing Panel Designed

A new simplified design for production of B-58 wing panels—one which design engineers believe will be both better and less costly—was under intensive study this week at Convair Fort Worth.

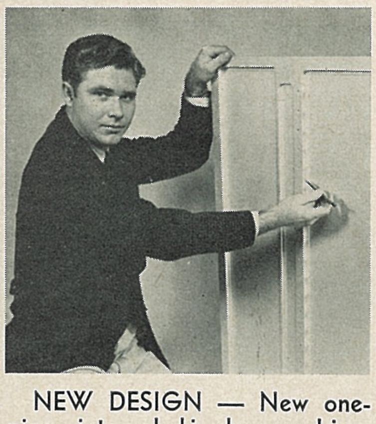
The new design, in the opinion of engineers, will give B-58 wing panels improved heat resistant characteristics, in addition to providing savings in time and money.

The secret is in the development of the one-piece integral skin-slug combination panel.

In the new panel, one piece of metal is etched chemically in such a fashion that one surface becomes a skin, according to M. S. (Marv) Howeth of manufacturing research.

Cross members remain to form the slug. Inside these, honeycomb is fitted to provide the core. Then all that remains is to attach a single skin to complete the panel.

D. L. Allie, senior manufacturing research engineer, said that with the new method, contour panels can be manufactured, while with the old method only flat panels were possible.



NEW DESIGN — New one-piece integral skin-slug combination wing panel designed at Convair Fort Worth for B-58 is shown here by M. S. (Marv) Howeth of manufacturing research.

C-V CONVAIR

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MEETING HIGHLIGHTS—Astronautics Management Club members turned out in force at El Cortez Hotel last week to hear Frank Pace Jr., president of General Dynamics Corporation, shown speaking at left. At right was scene when Convair President J. V. Naish, left, presented President's Award for cost reduction to O. H. Johnson of manufacturing control. Johnson received plaque and "purchase order" on Astronautics for $250 gift of his choice. J. K. Davant, manager of sponsoring industrial engineering department, beams his approval.

880 Flies Inland On Edwards Visit For More Testing

Convair's No. 1 jet transport made its first overnight jaunt away from home base when it flew to Edwards AFB, Calif., last week for two test flights.

The 880 went into the second part of its flight test program last Monday (Feb. 23) after two weeks on the ground for check-over. On its tenth flight, third of the new series, it was landed at Edwards AFB Wednesday following a routine two-hour flight offshore in the morning to run stability, control, and flutter tests.

With Don Germeraad, chief engineering test pilot, and John Knebel, co-pilot, at the controls, it made an afternoon flight over the Edwards testing area to check out emergency systems.

The next morning it took off at 7:30 a.m. to determine just how well it would handle and the length of runway required at maximum load. Packed for the first time with ballast to simulate a full load of passengers, cargo, and fuel, the plane was checked for takeoff and climb performance at maximum gross weight of 184,500 lbs. The morning flight was also the first of a series to calibrate air speed systems.

Edwards AFB was selected as the site of the Wednesday and Thursday tests because, through cooperation of the Air Force, equipment was available for the recording of the tests. Camera installations along the runway took closeup shots during taxi and takeoff and instruments in the tower measured height and speed of the plane off the runway.

A ground crew of ten Convair SD men under S. J. Barinka, 880 superintendent, was on hand at Edwards to service plane No. 1 on its overnight trip.

Flight crew besides Germeraad and Knebel were J. E. Moroney and A. E. Hunt, senior flight test engineers; E. H. Davies, senior instrumentation engineer; and R. M. Bloom, senior control engineer.

Convair's swept-wing transport will not be making another trip to Edwards until this summer when it will be based there for several weeks for landing and takeoff checks.

Another milestone in the 880 program will be reached this week when plane No. 3 is rolled out of final assembly to go to field operations.

H. F. Dunholter Astro Asst. Chief Engineer

Appointment of Dr. Howard F. Dunholter, a veteran of Convair's ballistic missile program, to the post of assistant chief engineer-development has been announced at Convair Astronautics by Mortimer Rosenbaum, chief engineer.

Dunholter succeeds the late Dr. Hans Friedrich.



H. F. Dunholter

Other engineering appointments revealed at the same time include:

W. F. Radcliffe, former chief of aero physics, to Dunholter's old post of chief development engineer; G. L. Armstrong from chief of dynamics to a new position as chief applied mechanics engineer; Willis B. Mitchell to succeed Radcliffe; and Karl Kachigan to succeed Armstrong.

Dunholter, holder of a Ph.D. in physics from the University of Cincinnati, joined Vultee Aircraft in 1939. He became head of Convair's thermodynamics group in 1942 and worked extensively on the Atlas project. In 1955 he became chief development engineer for the Atlas program.

Radcliffe came to Convair in 1947 as a research engineer specializing in ICBM work. He rose to senior thermodynamics engineer, design specialist and thermodynamics group engineer. He has been chief of aerophysics since May, 1956. Radcliffe holds a M.S. degree in mathematics.

Armstrong, holder of a M.S. from the University of Illinois, has been with Convair since 1954. He was named a dynamics group engineer in 1955.

'Man of Year' Award Goes to 'Augie' Hill

Convair SD's Management Club, now the largest in the country, bestowed its top annual honor—the Man of the Year—on A. E. "Augie" Hill, Plant 1 works manager, Feb. 18 in El Cortez Hotel.

Making the presentation before a capacity crowd was A. W. Morgan, SD assistant manager—operations. He traced Hill's Convair career back to 1940 when he joined Consolidated Vultee as an assistant foreman and described various duties Hill performed during his years with Convair.

Included were stints as department foreman and assistant superintendent, assistant chief tool engineer, chief tool engineer, chief manufacturing engineer and in June, 1956, promotion to Plant 1 works manager.

"Some day I'm going to write a book about this man," Morgan said, handing over the silver mug to Hill. "In addition to his outstanding record with Convair, many people are not aware that he also performs a fine job for his community as president of the San Diego Sheltered Workshop for the physically handicapped."

Club members gave Hill a standing ovation.

The award was made at the club's annual National Manage-

(Continued on Page 2)

Free World Depending On Convair, Says Pace

Convair men and women are among this nation's foremost contributors to the safety of the free world.

So stated Frank Pace Jr., president of General Dynamics Corporation, in an address before the Convair Astronautics Management Club last week.

Pace spoke highly of Convair's development of the Atlas ICBM, the F-102 and F-106, the B-58 and the Terrier and Tartar missiles as key weapons in our race for survival.

"And we must pursue this problem of survival relentlessly," Pace said.

"I see our efforts directed more toward competition with the USSR which would destroy our way of life than with other business firms," he added.

In his "off the cuff" talk, Pace told the 625 persons assembled at the El Cortez Hotel about other General Dynamics divisions. He spoke of their background, their accomplishments and their products. And he showed how each fits into the overall General Dynamics family.

"Where we are today is important," Pace said. "But where we are heading is more important."

On future plans Pace outlined a program of retaining General Dynamics' position as a top defense contractor while broadening its civilian production.

In his discussion of commercial ventures, Pace said Convair has done a "remarkable" job with the 240, 340 and 440 transports. He said that when General Dynamics acquired Convair some called the airline business "risky."

"We are involved in a 'chancey' business," Pace added. "We have to take chances to succeed."

He went on to say that the commercial airplane program proved profitable. It led directly into the present 880 jet airliner. Pace calls it "the best of all jet airliners." He said that 20 years would lapse before an adequate replacement will be ready for it.

The tall, soft-speaking Southerner described his "greatest personal thrill" as watching the countdown and launching of an Atlas ICBM recently in Florida. He spoke of the sight in glowing terms, ending with: "Gentlemen, there just aren't words to describe the sight."

He envisioned the Astronautics team as having a very important influence upon the coming age. He told the men they were privileged to "be among the first to generate the thoughts that permit us to do something new—conquer space."

Pace concluded his remarks with the statement that General Dynamics will continue to grow. He pointed out that present—and future—massing of manpower, brainpower and leadership with adequate financial backing can, with practical application, lead the Corporation into ever-greater achievements.

J. V. Naish, Convair president, introduced Pace after a short talk and presentation of the annual President's Award for cost reduction activities. O. H. Johnson, a master schedule analyst in manufacturing control, received the honor.

Naish revealed that Cost Improvement Proposals at Astro resulted in savings of $761,410 during 1958. Employee Suggestion savings added another $120,949 in savings for the year.

Johnson personally accounted for savings of $378,419 with two CIPs. He received a plaque and a $250 "purchase order" on Convair Astronautics for a gift of his choice.

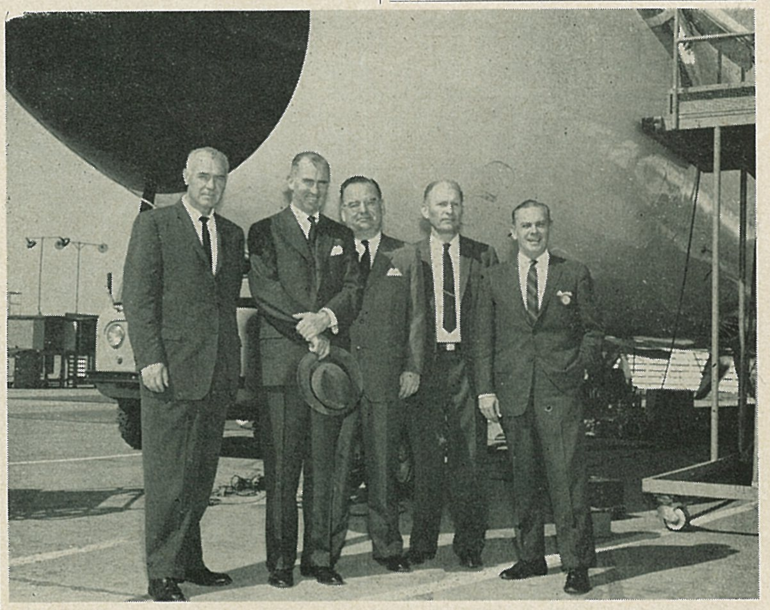
Seven other Astro employees were also eligible for the award after having CIPs installed that saved at least $25,000 each. Naish led the crowd in a round of applause.

"If I wore a hat, it would be

(Continued on Page 2)



TOP HONOR—A. E. Hill, 1958 Man of the Year at Convair SD, accepts symbolic mug from A. W. Morgan, assistant manager—operations. On hand for presentation at El Cortez Hotel were the Plant 1 works manager's wife, Lenore, and daughter, Mrs. Joan Brimhall.



PACE AND 880—Frank Pace Jr., in San Diego on business, took time out to inspect jet 880. From left, A. W. Morgan, SD Division assistant manager—operations; Pace, president of General Dynamics Corporation; James A. Linen, publisher of Time magazine; SD Chief Engineer Ralph Bayless; J. G. Zevely, Convair director of contracts and commercial sales.



WELL DESERVED—Initial Workman's Safety Committee appointed for Astronautics operations at Vandenberg AFB did outstanding job during four months of duty. Only six doctor cases and no lost-time accidents were reported. Otis Tucker, left, honors R. L. Dixon, committee chairman, with pin marking event while Don Morgan, safety engineer, looks on.

Flight Test Group Meets At Edwards

Convair's flight test council held its annual meeting at Edwards Feb. 23, 24 and 25 to discuss flight test organizations with a view to increasing efficiency in all phases of flight testing.

Council speakers included Al Phillips, chief of data processing and computation branch AFFTC at Edwards AFB, who spoke on "considerations of planning and executing flight test programs," and Ken Kleinknecht of NASA high speed flight station who reviewed the X-15 flight test program. Council members were entertained Monday evening at dinner at Antelope Valley Inn.

Participating from Antelope Valley facilities were project manager V. L. Allwardt, chief engineering test pilot R. L. Johnson, and chief flight test engineer G. F. Miller, all of Edwards. Chief pilot R. E. Myrann and assistant chief pilot H. B. Henderson, both of Palmdale, and K. W. Jeremiah, MSTS facility manager. Others were P. M. Prophett, A. J. Seifert, W. D. Carrier, H. K. Cheney, all of San Diego; R. A. Ackley, Astro; M. C. Terry and J. M. Fitzpatrick, Holloman; R. P. Scott and B. A. Erickson, Fort Worth; G. C. Ames, T. P. Price and M. S. Roberts, all of Pomona.

'Augie' Hill Winner Of SD 'Man of Year'

(Continued from Page 1)
ment Association night with representatives of the association on hand for the meeting.

They congratulated Ed Caldwell, club president, and members for their fine showing during the past year and pointed out that the Convair San Diego group is now the largest Management Club in the United States with a total membership of 2,415.

The program was sponsored by manufacturing control, Plants 1 and 2, manufacturing development and process specifications departments.

Free World Depending On Convair, Says Pace

(Continued from Page 1)
off to you for your cost reduction work in 1958," Naish told the guests. "If I were to challenge you, it would be to even greater work in the same field today and tomorrow."

Earlier in the program Mortimer Rosenbaum, Astro's chief engineer, presented the first Missileman-of-the-Month award made by the club. It went to the late Dr. Hans R. Friedrich. His widow, Johanna, accepted, while those present gave her a standing ovation.

E. T. Clare presided. J. K. Davant, manager of industrial engineering, extended the welcoming address on behalf of the sponsoring department.

Special guests were the General Dynamics Corporation's board of directors and board of management as well as ranking Convair officials.

Few Fashion Tickets Left

A limited supply of tickets to the coming fashion show for Convair SD and Astronautics women is still on hand at employee services, both plant sites.

The show, sponsored by the Industrial Recreation Council, will be held next Wednesday (March 11) in the Palm Room of the U. S. Grant Hotel at 8 p.m.

Arranged especially for working girls, styles, supplied by stores of the San Diego Downtown Association, will demonstrate appropriate dress for both shop and office wear. Professional models will be introduced by Molly Morse Wolfe, well-known commentator. Pauline Gleason will be organist.

Orchids for the hostesses are being furnished by the San Diego Orchid Society, said Martha Woodberry and Grayce Fath, CRA women's activities co-commissioners at SD, who are coordinating the show. Toni Tacoma of the Downtown Association is fashion coordinator.

Tickets at $1 each are at SD and Astro employee services; Rose Canyon from Dorothy Kniffen, ext. 2239; Fordham St. parts sales building from Bessie Cooper, ext. 1000.

SD Club Squadron Sponsors Survival Movie, Narration

Dana and Ginger Lamb, two nationally recognized survival experts, will personally narrate their new feature length color film, "Conquest of Mystic Mountains," March 20 and 21 at Hoover High School auditorium.

Convair SD Management Club's Air Explorer Squadron 340 is sponsoring the event. Squadron adviser, Andy Drollinger, said all profits will be used to defray expenses for the squadron's two-week rubber boat adventure on San Juan and Colorado rivers which starts June 12.

Drollinger said it will be first public showing of the film in the United States. It concerns 18 months of survival problems and techniques experienced by the Lambs in the jungles of Nicaragua.

Showings on March 20 and 21, start at 8 p.m. Tickets are priced at $1 for adults, 65c for children under 14. A special matinee for Cub and Boy Scouts starts 2 p.m., March 21.

Tickets are available at SD employee services, Plants 1 and 2.

Dewey Named To Project Control Post

W. J. Dewey has been named to position of program control administrator at Convair SD, according to an announcement of G. A. Covington, manager of master planning.

Dewey, who has been with Convair SD since 1940, succeeds W. S. Stroud, now in charge of the F-108 wing program as special assistant to the division manager.



W. J. Dewey

A native of Nebraska, Dewey was in the engineering department until 1956 when he joined long range planning as project administrator. He was in charge of customer support control group as well as the remaining 440 transport activities.

Previously, he had been closely associated with the B-24, B-36, and R3Y programs, having been assigned a year-and-a-half to Patuxent, Md., heading Convair's contingent during Navy tests of the seaplane transport.

Assuming Dewey's duties is J. E. May, former service parts general supervisor.

Other personnel shifts see Harry McKay, chief production test pilot, taking over as project administrator of the Model 8 program at Plant 2, a post vacated when A. J. Braidic assumed responsibility of the 880 program control section. E. H. Schmidt has been appointed project administrator for the new F-108 wing subcontract section.

All new appointees report directly to Dewey.

★ ★ ★

Three new assignments within the Astronautics industrial engineering department have been announced by J. K. Davant, manager of industrial engineering.

M. M. Mrvichin is now on a staff assignment for Davant. T. F. McCubbin is acting chief of systems and procedures and Art Wrightson is acting chief of facilities control on training assignments.

'Convair Instruments' Gets New Address

Convair Instruments, off-site facility of Convair, formerly known as Datafax Instruments, has moved to new quarters at 3595 Frontier St., San Diego.

Previous headquarters since its inception last year were on La Jolla Blvd., La Jolla.

The program, headed by E. E. Muehlner as project engineer, designs, develops, and produces specialized mechanical and electrical instruments and instrument systems. There now are 12 persons connected with the program.

CRA Discount Tickets:

DISNEYLAND — Magic Kingdom Club cards allowing discount purchases of tickets at box office for all ages.

FASHION SHOW — Tickets to Ind. Rec. Council fashion show March 11, $1 each.

MARINELAND — Discount tickets for all age groups.

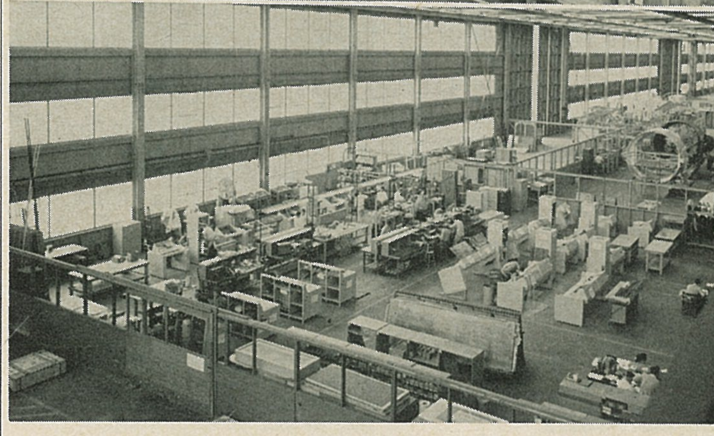
ROLLER SKATING — Free tickets to March 16 skate night at Skateland.

SLEEPING BEAUTY — Discount prices to showing at Fox Wilshire Theater, 8440 Wilshire Blvd., Beverly Hills, by presenting Magic Kingdom Club cards at box office.

SPACE PRIMER — "An Introduction to Astronautics," 10 cents each.







TRANSPLANTS—Goodly number of Astronautics personnel are quartered at Convair SD plants. At top is support publications group of product support, Bldg. 4, Plant 1. Center: support supply section, also Bldg. 4, Plant 1. Checking items are Fred Razo and Ed Anderson. On lift, Vance Carter. Below: general view of east side of Bldg. 3, Plant 2, with trainer manufacture in foreground.

'Growing Pains' Affect Astro Product Support

Major relocation efforts involving the majority of all product support employees of Convair Astronautics were all but complete this week.

During February the bulk of product support employees working in off-site quarters either changed facilities or moved from one location to another within these facilities. One exception was the customer training function which remained at Barnard School.

"Growing pains," for the most part, influenced the program. Product support has been adding new employees steadily for many months. It was a case of more people than space at one location. Too, new facilities were activated or expanded.

"We have also planned to bring together groups in frequent contact with one another for greater efficiency," said E. A. Reynolds, Astro's manager of product support.

Three major off-site facilities were involved. They were the Mallen Bldg. on El Cajon Blvd., Bldg. 4 at Plant 1 and Bldg. 3 at Plant 2 of San Diego Division.

At Plant 1 product support gave up the mezzanine of Bldg. 4 it had utilized for some time. Astro now takes in the majority of the ground floor in the south end of the building. Most offices are situated nearer the center of the building than the south entrance.

Quartered there are members of: data support systems (Dept. 305); support publications (Dept. 322); most of support engineering (Dept. 321); support supply (Dept. 341); support quality control (Dept. 342); and support activation (Dept. 350).

Astro occupies the bulk of the east side of Bldg. 3, Plant 2, for support maintenance (Dept. 344) and support manufacturing control (Dept. 343).

At Mallen Bldg. Astro now has support logistics (Dept. 325); and support documentation (Dept. 327).

Reynolds, E. T. Clare, support service manager, C. F. McCabe, support base activation manager, and J. P. Scheu, chief of support planning and control, are located at the Astro plant. Scheu's planning and estimating and task control function are also housed at the plant.

Research Laboratory To Co-Host Meeting

Convair Scientific Research Laboratory will be co-host of the two-day meeting (March 23-24) of the Western States Section of the Combustion Institute in San Diego.

The Convair laboratory is combining with San Diego State College to sponsor the technical sessions in the Humanities and Social Sciences Auditorium on SD State campus.

Convair people interested in attending may obtain further details by calling BR-7-7950, ext. 39.

BLAKELY TO TALK FOR ACCOUNTANTS

J. S. Blakely, Convair SD manager of cost accounting, will address a dinner meeting of SD Chapter, National Association of Accountants at the Town and Country Hotel on March 11. Convair people interested may call R. G. Macomber, Rose Canyon, ext. 2225, for reservations.

Bloodmobile Visit To SD March 5

First bloodmobile visit of the year is scheduled for tomorrow (March 5) at Plant 2, Convair SD.

At least 300 first-shift donors are expected to turn out to replenish the blood supply for Convair SD employees. Bloodmobile unit of the San Diego Blood Bank will be set up in the center section of Bldg. 3 from 10 a.m. to 2 p.m.

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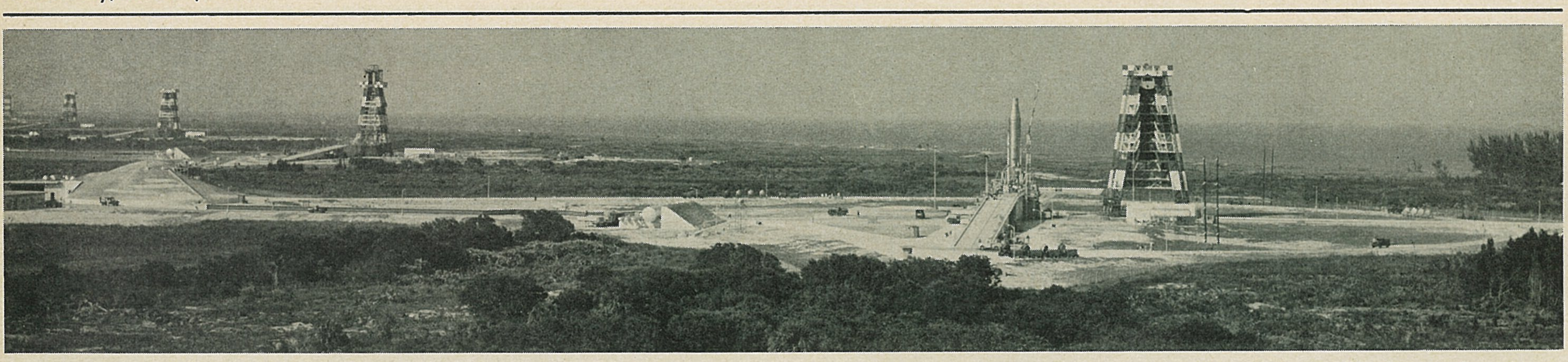
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 69C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



AT THE CAPE—A scene similar to this is viewed daily by most of Convair contingent assigned to AFMTC, Cape Canaveral, Florida. Shown are Atlas towers and blockhouses. Sand and tropical growth are typical of landscape thereabouts. Ocean test range begins here, extends deep into South Atlantic.

Convair Ranks At Canaveral Nearly 1,000

Convair's population at the Air Force Missile Test Center at Cape Canaveral, Florida is now almost 1,000 and is expected to remain at this level through this year and next.

B. G. MacNabb, Convair base manager, said last week that this estimate does not take into consideration any new programs which might be assigned to the facility.

"Our work load is expected to remain fairly constant from now on," he said last week. "Of course, there could be new assignments at any time that could materially affect the outlook and increase our activity."

Convair personnel assigned to Florida date back to 1953 when a handful of settlers moved there, assigned to one of the pioneering projects connected with the Atlas program which was to follow. Gradually Convair's population there has grown. In late 1957 it had topped 600 and during 1958 passed the 900 mark where it remains currently. A high percentage have never worked for Convair at any other facility.

All but about 50 work at AFMTC itself, the vast test center from which Atlas and other missiles are fired. There, Convair operates two hangars and several complexes concerned with tests and firings. Certain administrative groups, however, have office space at Patrick AFB some 20 miles distant.

Queried if the build-up at Vandenberg AFB in California would affect Convair's operations at Cape Canaveral, W. W. Withee, assistant chief engineer-test, commented:

"The total employment level at AFMTC will not be affected by the Vandenberg operation.

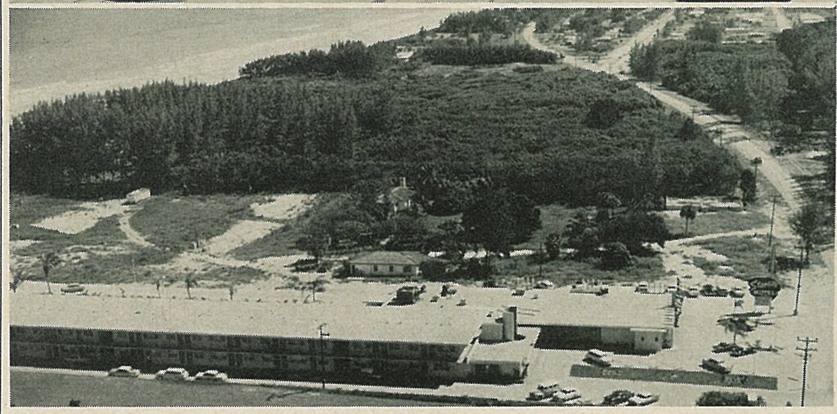
"AFMTC is primarily concerned with research and development. They work out the 'bugs' and point the way to the reliable, operational missile. At the same time, there is continuing research and development into new refinements.

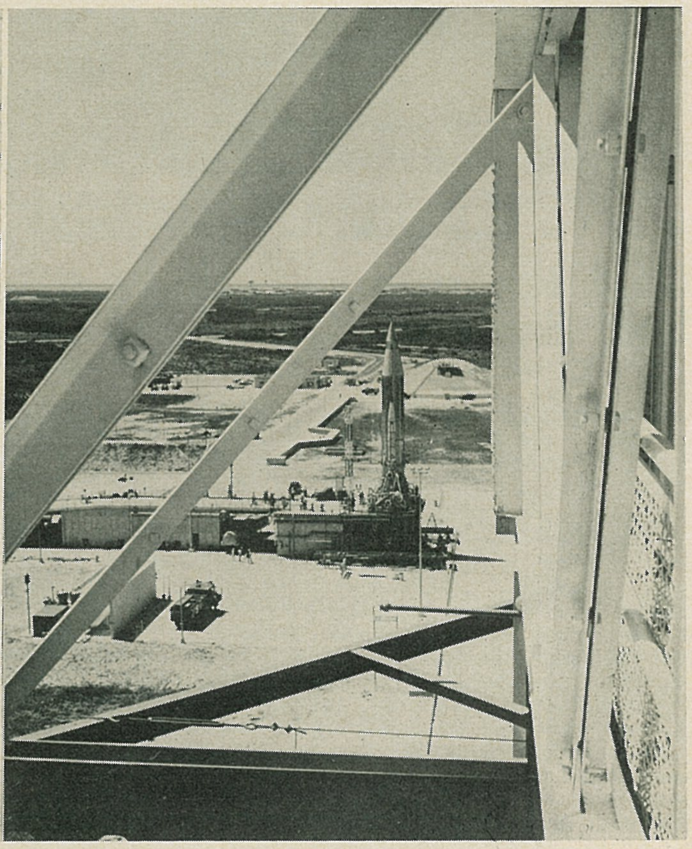
"Vandenberg, on the other hand, is a training and operating base.

"AFMTC will have some interchange of personnel back and forth, to supply Vandenberg with the know-how gained from experience. Certain highly qualified senior personnel have been transferred on a permanent basis."

Typical of these is Robert C. Shotwell, test conductor, who has been at AFMTC from the start of operations there. He will be test conductor on Complex 65-1, first Atlas complex activated at Vandenberg.







CLOSE-UPS—Novel photo at right shows Atlas missile standing alone. It was taken from missile's tower after latter had been rolled away prior to launch. Top left is scene in "ready room" near blockhouse. Lower left is Starlite Motel, transients' hdqs.

Astro Plant Makes A Deep Impression

Astronautics' plant on Kearny Mesa made quite an impression on a driver delivering a shipment from Datamation Inc. of Compton, Calif.

After a vain attempt to get rid of his cargo at Convair SD, he finally found Astronautics and reported back that he had made delivery at "a building about ten stories high, all trimmed in aluminum!"

B-58 20mm Cannon Fires 50,000 Rounds in Tests

All's quiet on the "northern front" at Convair Fort Worth again after the B-58's 20-millimeter cannon fired its 50,000th round to complete another series of weapon tests.

This most recent in the test series was conducted at the gun butt in the north area of the reservation. For the tests, the gun was mounted in a specially built stand to simulate its tail position on the B-58.

T. N. (Troy) Whitehurst of Dept. 6-4 and C. G. Hawkins of Dept. 6-7 are now faced with the task of about two months' "reducing." But no diet is involved. The reduction will involve data, not pounds. Both were assigned to the project when it got under way last July.

"Primary purpose of the tests on the six-barrel M-61 Gatling-type weapon was to check out production ammunition boxes and feed mechanism for active defense," said Whitehurst, lanky design engineer.

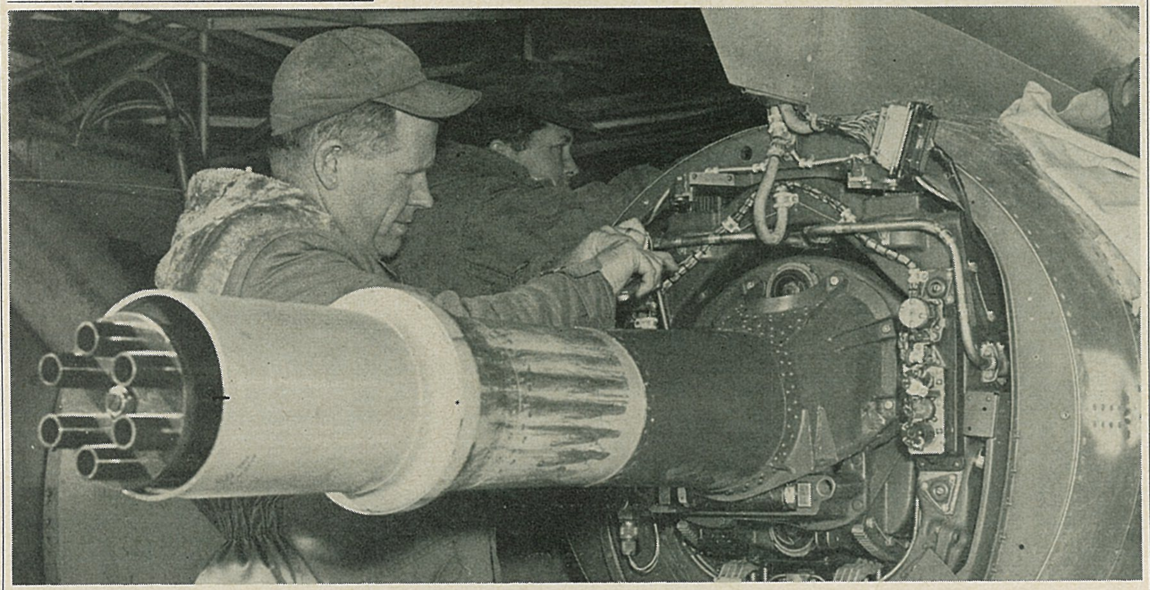
Developed by General Electric Co., the gun produces a continuous, loud roar when it is fired, rather than the short, staccato chatter that came from the 20-millimeter cannon fired from the now memorialized B-36.

That's because the gun can fire at a rate of more than 6,000 rounds a minute.

"This gun is used in the F-104 and F-105 as well as in the Hustler," said Hawkins, test lab engineer from Texas A&M, as is Whitehurst.

Hawkins said the B-58 weapon weighs approximately 270 pounds, and is considered quite accurate.

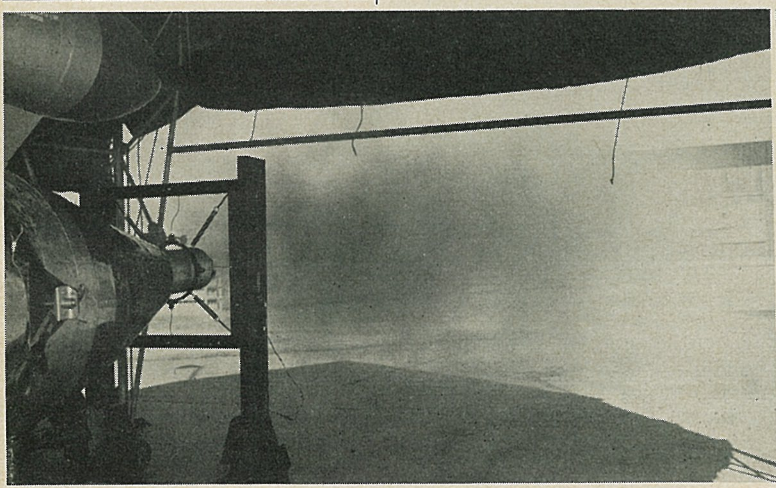
The cannon has been test fired in the air from the tail of a Hustler over the Gulf of Mexico. Prior to this, the system was proved successful after other ground tests and flight test firings from a B-47 at Eglin AFB in Florida.



FINAL TOUCH—Last adjustments are completed prior to firing three-second burst from B-58's six-barrel M-61 Gatling type weapon. Cannon has been tested in firing program at Fort Worth.

Helmich Will Advise Prospective Students

W. F. Helmich Jr., senior thermodynamics engineer at Convair SD, has been named to the MIT educational board for a three-year term. As an educational counselor for the San Diego area, Helmich's duties will consist of counseling and advising prospective students.



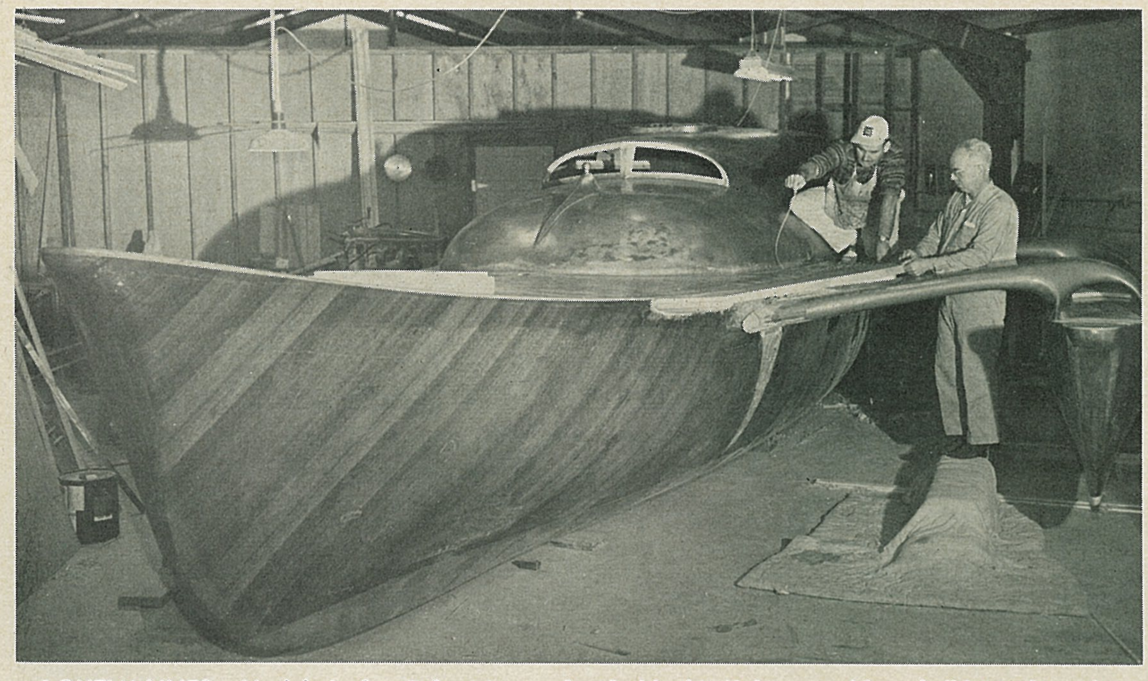


FIRE AWAY—Shots from B-58's cannon come so fast that sound is a continuous roar. This was scene during actual firing at Fort Worth test target. At right C. G. Hawkins, left, Dept. 6-7, and T. N. (Troy) Whitehurst, Dept. 6-4, stand by to reduce data.

Brazilian Will Visit Convair SD Library

Abner Vicentini, head librarian, Biblioteca Central, Instituto Tecnologico de Aeronautica, at Sao Paulo, Brazil, will be in San Diego next week (March 10) to visit Convair SD's engineering library.

Keith Blair, SD chief librarian, said that Vicentini is in the United States for a three months' tour of the country's libraries.



LOVELY LINES—Modeled after Polynesian craft of old, this Kolumaran (three hulls) is taking shape at San Diego. Builders are Dean Kennedy and Jack Fulton, both SD Dept. 15-6.

Convair Men Serving Space Administration

Eight Convair men and one from General Atomic Division hold memberships on committees of the National Aeronautics and Space Administration.

From Convair SD, C. W. Frick, chief of applied research, is a member of the Committee on Aircraft Aerodynamics; Michael Dublin, chief of dynamics, Committee on Structural Dynamics; and Dr. W. H. Steurer, materials technical chief, Committee on Materials; and Dr. A. M. Small of engineering, Committee on Aircraft Operating Problems.

Astronautics committee members are Krafft Ehricke, Centaur project director, Committee on Electrical Power Plant Systems; G. L. Armstrong, chief of dynamics, Committee on Control, Guidance, and Navigation; and Robert S. Shorey, engineering, Committee on Structural Design. K. J. Bossart, technical director for Astronautics, is a member of the Committee on Missile and Spacecraft Aerodynamics.

Prof. P. H. Miller of General Atomic Division is a member of the Committee on Nuclear Energy Processes.

Two Convair Men Build Unique 40-ft. Kolumaran

In a warehouse on the outskirts of Old Town in San Diego an odd-shaped dream is becoming a reality for two Convair men.

There the lore of ancient Polynesians, experts in their own rights as pioneer ship builders, and modern principles and methods are being fused together in a manner that will produce a craft unique in this day and age.

In last phase of construction now (launching is set for this May) is a 40-ft. Kolumaran (in Polynesian the word means "three logs"). As the name implies, the craft is three-hulled (because of the double outriggers), but this is as far as the Polynesian ancestry goes.

The builders, Jack Fulton and Dean Kennedy (both SD Dept. 15-6) have planned and labored on this unique craft for over two years. The yacht will weigh a mere 3,000 lbs. and draw but 10 inches of water.

This almost unbelievably light weight and shallow draft for so large a boat will enable it to skim over water at speeds near that of the prevailing wind.

"The boat was built on the simple theory that the less surface exposed to water, the greater the speed," Fulton says.

Tank and sailing tests with an exact-scale model have demonstrated it is almost impossible for the boat to capsize even in 100-mph winds.

Outriggers are the same shape and about half of boat's length. Each has seven separate watertight compartments, one of which the builders will use for additional storage space.

Cabin, 8x16-ft., mounted on the main hull, has plenty of headroom (6 ft., 8 in. from deck to overhead), berthing and other accommodations for five people and a superabundance of storage space.

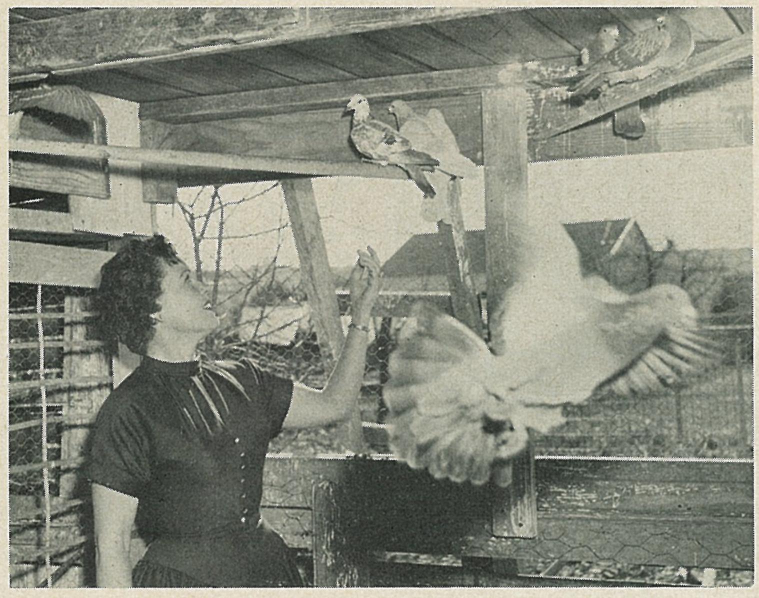
Access around cabin, which extends full width of deck, is by wooden catwalk hanging over either side.

Other unique features include an articulated rudder which whips back and forth with the flexibility of an alligator's tail, a high aspect ratio sail plan (tall and thin). Hulls are of monocoque construction (all one piece) built up of shaped plywood and covered with stressed fiber glass. Outrigger arms, built of uni-directional fiber glass, are touted to be strong as steel.

"Even with all these innovations the boat is reminiscent of the outrigger canoes used by the ancient Polynesians who traveled miles across open ocean waters between islands of the South Pacific," Fulton says.

"Though the craft was primarily designed for speed, comfort, and beauty, she assumed such a distinctive Polynesian appearance that we have already christened it the 'Kolu Naia' (three porpoises)."

The dream of the builders is to visit islands in the Pacific and explore coral waters where conventional sailboats dare not approach.



CHAMPION—Chris Combs of Convair Fort Worth's Dept. 35 checks over some of her 75 racing pigeons. She entered four in recent Fort Worth Fat Stock Show, took one first, two seconds and a third.

Unwashed

Year-Old Racing Pigeon Wins Blue Ribbon—Without a Bath

Chris Combs of Convair Fort Worth's Dept. 35 took highest honors with one of her pigeons at the recent Fort Worth Fat Stock Show.

The bird is "Sir Joe," a champion one-year-old racing homer.

Mrs. Combs, whose husband, B. H. Combs, also belongs to the Convair clan, said she had never before entered any of her 75 pigeons in any sort of show. Decision to enter this one was at the last minute.

"I didn't even have time to wash Sir Joe before taking him down there," she said.

Mr. and Mrs. Combs didn't wait for the judging, since they weren't expecting to place.

"It was quite a surprise when they called us and said Sir Joe took a first. I had four birds entered, and the others won two second places and one third place," she added.

Both Combs and his wife are members of the Greater Fort Worth Racing Pigeon Club, and are active in almost all racing contests in this area.

Combs says the pigeons fly at a speed of 60 mph and have above-average vision—their eyes are equipped with three lenses.

"We let our birds out to fly once or twice a day, for exercise," Combs added.

PACE PLATFORM TENNIS CHAMP

General Dynamics President Frank Pace Jr., teamed with advertising executive Clifford Sutter Feb. 15 to win the American Platform Tennis Association men's national senior doubles championship at Scarsdale, N.Y.

In the final match, narrowed down from a field of 31 entries, Pace and Sutter defeated James Carlysle and Berkeley Johnson, national titleholders for past two years, 6-0, 6-3.

Platform tennis, sometimes called "paddle tennis," is played with wooden paddles and a sponge rubber ball on a wooden platform, one-quarter the size of a tennis court.

Is It News?

Call Convairiety

FW Modifying Hustler As Test Bed For F-108

A B-58 Hustler supersonic bomber is now undergoing modification in development department at Convair Fort Worth to make it into a flying test bed for North American Aviation Co.'s F-108 program.

Both North American and subcontracting Hughes Aircraft officials were on hand for the transfer of the plane which had been in test at Edwards Air Force Base. Leonard Roe, supervisor of contracts, and W. D. Halsey, assistant manager of development, represented Convair.

After modification, the B-58 will go into a pre-F-108 flight test program.

Convair development people estimate that modification will be completed this summer.

In addition to the aircraft already in the F-108 program, another Hustler is expected to take part around the middle of April.

Convair is also building two special pods as part of the program.

On hand at the inspection ceremony in addition to Roe and Halsey were O. Wehmanen, project engineer, J. Jerotz of Hughes, Robert Ralston and Lory Watts of North American.

* * *

Convair San Diego is designing and manufacturing the F-108 wing under a multimillion dollar contract with North American. Project staff has been formed under W. S. Stroud and engineers are deep in the design of the wing for the trisonic interceptor which is being built for the Air Force. The long range jet will have a combat ceiling of over 60,000 feet and combat range of at least 1,000 miles.



BIGGEST VALENTINE—Pert Joyce Christian of Convair Fort Worth accepts a B-58 valentine on behalf of company from crew at Edwards AFB which painted it. Hustler was returned from Edwards to be modified for pre-F-108 flight test program.

Library of Technical Matter Available to Convair Folk

One of the most extensive concentrations of scientific and technical information known to the free world is available to Convair employees everywhere through the facilities of an unusual organization.

It's called the Armed Services Technical Information Agency (ASTIA).

This government agency has brought together thousands of reports, old and new, on Department of Defense sponsored scientific and technical programs since World War II.

Actual reports or copies have been compiled into a vast library. An elaborate cross-filing system lists each report under a number of headings for easy access to the user. Included are the works of service personnel as well as that performed by contractors working for all Department of Defense agencies.

Central storehouse for these reports is ASTIA's Washington, D. C. headquarters. However, regional offices in New York, Dayton, Los Angeles and San Francisco maintain catalogued cards on all reports as well as microcards. For instance, the Los Angeles office reports 200,000 microcards available for immediate consultation or borrowing.

Louis Canter, chief librarian at Convair Astronautics, reports extensive use of services available at the Los Angeles office by personnel at Astronautics, San Diego and Pomona.

"Astronautics researchers are able to determine in advance what is known on various projects or programs, avoiding costly duplication of effort," Canter said.

Questions concerning ASTIA material available and its use should be directed to the chief librarian at each Convair division.

New Project Office Formed

A new project office has been established in Convair SD engineering to handle contracts on which SD Division acts as subcontractor to other Convair divisions.

The office will coordinate all assistance to other company divisions.

Project engineer for the assist work is C. A. Mohr who will report to E. D. Shannon of special assignments.

Mohr first joined Convair SD in 1936 in engineering. In 1940 he went to Vultee Aircraft and transferred back to SD Division in 1947 as a group engineer. He was in charge of preliminary design on the F-102 from 1950 to 1952 when he joined the Model 8 project office.

Location of the new office will be in the administration area of engineering on the third floor of Bldg. 5.

880 Hits Headlines In Distant Denmark

First flight of the Convair 880 hit the headlines in Haderslev, Denmark.

A clipping received by R. W. Peters, chief tooling engineer at SD Plant 1, from an uncle in the Danish town carried a picture of the 880 and the news that the "jet passenger liner, which has a speed of 985 kilometers per hour and is the world's fastest, has taken its first flight from Lindbergh Field, San Diego, Calif. As is known, Swiss Air and SAS have bought five planes of this kind."

Steurer Discusses Rockets, Spaceships

Dr. W. H. Steurer, chief of engineering materials technical group at Convair SD, discussed "Rockets and Spaceships" at a meeting last month in Rochester, N.Y.

Dr. Steurer reviewed development of rockets and missiles, dealing with extremes of temperatures, stress and strain, weight, cosmic and solar radiation, and the effects of cosmic dust and fragments on missile materials.

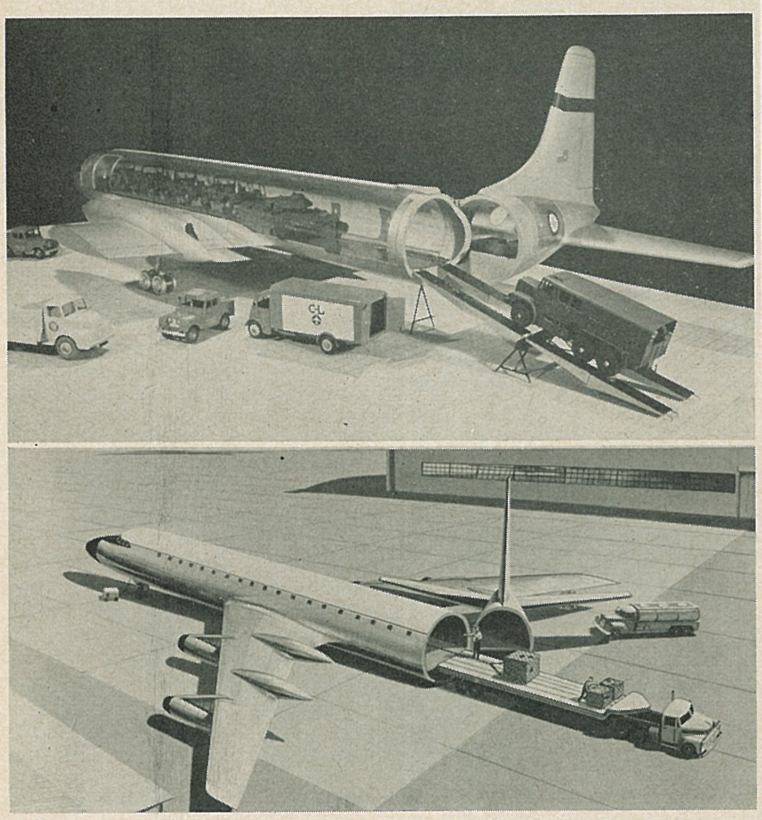
The meeting was sponsored jointly by the Rochester Chapter of the American Society for Metals, American Foundrymen's Society, and the Superintendents and Production Supervisors Group of the Industrial Management Council.



"Well, at least you have a powerful cast, Marie."

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:
Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.



SWING-TAILS—At top is model of Canadair's CL-44, long-range turboprop, with swing-tail feature to facilitate loading. Below is artist's conception of Convair 600 jet, also with swing tail. Plan under study calls for 600's main landing gear to "kneel," permitting ground-level loading.

Both Canadair, Convair Plan Swing-Tail Aircraft

NEW YORK—Plans for two new cargo transport aircraft, a turboprop and a turbojet, both employing swing-tail features to facilitate loading and unloading, were announced by Earl D. Johnson, executive vice president of General Dynamics Corporation, during a luncheon at the Wings Club here.

Canadair Limited of Montreal, a subsidiary of Dynamics, announced that the swing-tail feature, in which the whole aft section of the fuselage, including the entire tail, would swing aside, will become standard on its CL-44 long-range turboprop transport.

At the same time Convair Division in San Diego announced a proposed swing-tail cargo version of its 635 mile per hour Convair 600 jet transport.

Convair is building 25 passenger 600s for American Airlines and Canadair is producing the CL-44 in quantity for the Royal Canadian Air Force.

Johnson pointed out that rear-entry construction of this type has obvious advantages over previously constructed cargo aircraft. Long or bulky objects can be put aboard without maneuvering through a side door—vehicles can be driven directly into the fuselage. Other rear-entry types now in use have elevated tails or other features not as desirable aerodynamically as the classic straight-tube airliner fuselage, he said.

The CL-44, powered by four Rolls Royce Tyne 12 engines, has a cruising speed of more than 400 miles per hour, and a maximum takeoff weight of 205,000 pounds. It will be able to carry a maximum payload of 60,000 pounds or 167 passengers. With a load of 100 passengers it will have a range of 5,800 miles. The interior cabin is about 100 feet long.

The swing-tail Convair 600 would have a cargo-cabin area 80 feet long by ten feet, eight inches wide and seven feet one inch high. As a troop carrier it could haul 147 men in six-across seating or 123 in five-across configuration. Powered by four General Electric CJ-805-21 aft-fan engines, the plane would have a range of 5,750 miles with a payload of ten tons or 2,935 miles with a payload of 35 tons. Maximum takeoff weight is 275,500 pounds.

Center to Process Automatic Data

LOS ANGELES — The Electronic Control Systems facility of Stromberg-Carlson Division formally opened last month the first automatic data processing center on the West Coast for the preparation of magnetic tapes to be used to operate numerically controlled machine tools.

The Center will function as a customer service organization to support the preparation of magnetic tapes to customers' specifications for the operation of ECS DIGIMATIC Contouring Control Systems.

These systems are currently being installed and operated in leading aircraft manufacturing plants.

S-C Dedicates New Acoustic Test Facility

ROCHESTER — A demonstration of submarine-hunting by sonar marked the opening of the nation's largest indoor underwater acoustic test facility at Stromberg-Carlson last month. (SONAR is short for SOund NAvigation Ranging).

As high-ranking Navy personnel and General Dynamics executives attending the Anti-Submarine Warfare Conference here listened and watched, sound was transmitted underwater and the echo off a model submarine was recorded. The full advantages of the uniformity and stability of the indoor facility, in contrast to the instability of open-water measurements, were emphasized by this fully-instrumented demonstration.

RAdm. John S. Thach, a key commander in the Navy's anti-submarine defense planning, dedicated the new sonar facility by pouring into the tank a bottle of Arctic water collected by the atomic submarine Skate when it made its historic trip to the North Pole.

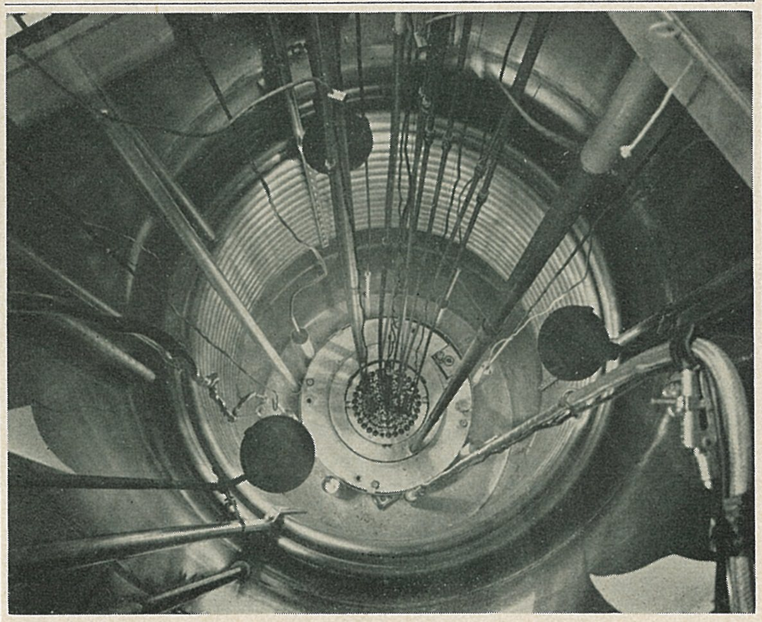
The new sonar tank, measuring 48 feet in diameter and 30 feet in depth, will play an important role in developing defenses against the deep-running nuclear submarine, Lawrence B. Richardson, senior vice president-engineering of General Dynamics, told the conference.

The new underwater acoustic facility is equipped to carry out basic research in sonar, and to study new techniques for detecting the quiet nuclear submarines.

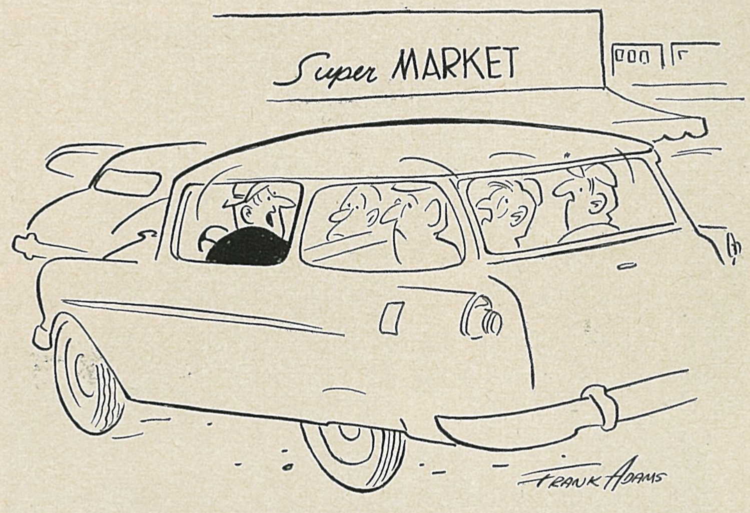
The size of the tank, accommodates the longer wave lengths which have come into use since World War II. The instrumentation also is unusually complete, providing maximum flexibility and utilization. It includes a seven-channel tape recorder-reproducer, an automatic sweep frequency transmission measuring set, a constant bandwidth analyzer, a proportional band analyzer, memory oscilloscopes and cameras, a high speed camera and a variety of transducers.

CANADAIR TO BUILD ELECTRONIC SORTER

MONTREAL — Canadair has been awarded a contract for the pilot installation of an electronic mail sorting machine.



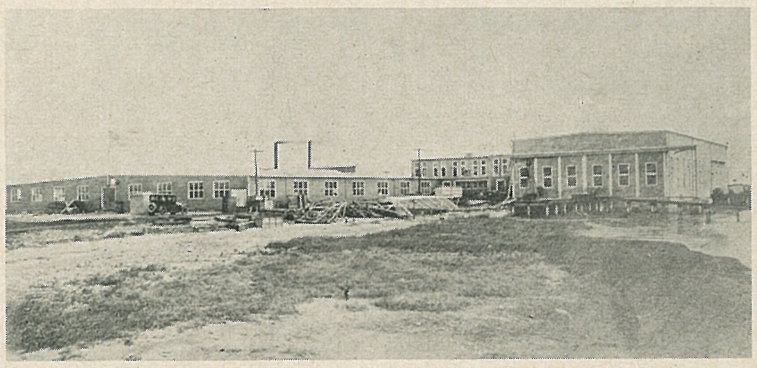
THIS IS TRIGA—This is photo of TRIGA reactor core, taken from top looking into and through 16 feet of water which serves as shielding. U. S. Veterans Administration Hospital at Omaha, Neb., has purchased one from General Atomic.



"As president of the car pool, I make a motion we stop and do our shopping . . . all opposed, signify by walkin' home . . ."

Gallaudet Forsakes Aircraft For Tennis Racket Strings!

(This is the third installment in a continuing history of Convair. The first two traced the early years of Gallaudet Aircraft, an important Convair "tributary," under the leadership of brilliant Edson Gallaudet, pioneer aircraft designer.)



This was the Gallaudet Aircraft factory building at East Greenwich, R.I., as it looked in the early '20s.

A "Liberty Tourist" airplane, built by Gallaudet Aircraft Corp. and called the "last word in travel comfort," figured in an amusing incident in 1920, later known as the "Bombing of F.D.R."

Franklin D. Roosevelt was to accept the Democratic vice presidential nomination in outdoor ceremonies at Hyde Park on Aug. 9. The New York Evening Post chartered the Liberty Tourist to deliver 1,000 special airplane editions to the scene. Piloting the plane was Leo Bourdon and his brother, Allen. (Bourdon, one-time Gallaudet employee and later with Consolidated, is still with Convair, in Dept. 99 at SD).

A field adjacent to the speaker's platform was too small to land on, so, while Allen circled, Leo tied the papers into 50-pound bundles and "bombed" the pasture. The bundles broke, papers scattered and the crowd ran to get them.

"We just about broke up the speaking!" Leo recalls.

* * *

By 1922 Gallaudet Aircraft was in serious financial straits. It had lost nearly $3 million since World War I. Its founder, Edson Gallaudet, had resigned and set up a business of his own—making waterproof tennis racket strings! They were manufactured by treating silk strands with airplane dope. He ultimately sold thousands of yards to sporting goods firms.

As Reuben Hollis Fleet, who founded Consolidated Aircraft the following year, said of Gallaudet, he "was a wonderful man as an engineer, but he would cheerfully undertake to build a plane with 15 innovations, any one of which could cause failure."

Fleet, destined to take over the Gallaudet assets when he formed Consolidated, was then 36 years old, a self-made businessman and ex-legislator who had served five years in the Air Service. He was born March 6, 1887, in Montesano, Wash. As a youngster he sometimes worked in the woods with his father, a timber buyer who had reached the Pacific Northwest from Kansas City by foot, horseback and stage coach.

Reuben Fleet finished grade school and entered Culver Military Academy, graduating in 1906 with an appointment to West Point. The Army ruled he would have to wait two years (until he was 21) to enter. By that time Fleet was launched on a business career of his own, as timber appraiser and real estate dealer.

Fleet struck his first blow for aviation in 1915, as adjutant of the Washington National Guard and youngest member of the State Legislature. With an aviator friend at the controls of a homemade plane, he circled the dome of the state capitol for 35 minutes—then introduced a bill appropriating $250,000 for aviation training in the National Guard. (This topped the $225,000 appropriation Congress had voted for the entire country!)

As Fleet expected, passage of the bill in the lower house attracted national attention. He let the measure die after the Signal Corps Aviation Section agreed to press Congress for funds to train one guardsman from each state annually.



President Woodrow Wilson is shown with Reuben H. Fleet at time of inauguration of air mail service.

Tool Apprentices Elected to Office

Two Convair SD tooling apprentices, Fred Simeth and Bob Barone, were elected last week secretary-treasurer and membership chairman, respectively, of the student chapter of American Society of Tool Engineers in San Diego.

Earl Williams (Dept. 600), chairman of the senior chapter of ASTE, will officiate April 10, 7 p.m., at San Diego Hotel when the student chapter receives its charter.



LOCK IT UP—J. A. Thornbury, security officer, instructs class on handling of classified information. Lectures have reached 40,000 at Convair SD. From left (first row): Robert Kenny (Dept. 188), Ruby Wade (Dept. 3), Marion Tate (Dept. 192), Norma Hunter (Dept. 6). In back row are Winona Lamb (Dept. 4) and P. E. DiBartola (Dept. 6).

Convair to Design New Data System

A $2,283,120 contract for design, construction, and installation of an automatic data handling system to be used at Wright Air Development Center Laboratories, Wright-Patterson AFB, Ohio, has been awarded Convair.

B. F. Coggan, Convair vice president and SD Division manager, said the project will be handled within the newly-integrated electronics organization. Stanley Rogers, research group engineer, will head an engineering team assigned to the project which will extend over two years.

'Waltz of Toreadors' Tickets Available

There are still a few tickets left at Convair SD employee services to the Old Globe Theater production, "Waltz of the Toreadors."

Convair SD people may purchase tickets to the March 8 performance at CRA reduced prices of two for the price of one. Seats are $1.75 and $2.25.



SALES PITCH—John Sneed, 15, Air Explorer Scout, "sells" Ed Caldwell, SD Management Club president, and A. W. Morgan, assistant manager—operations, tickets for survival film sponsored by Management Club Scout Troop 340.

Bldgs. 5 and 51 Moves Continue

As rehabilitation of Bldgs. 5 and 51 continues at Convair SD, the next two weekends will see several hundred engineering people shifting into different locations.

Two groups of general drafting will move to the second floor of Bldg. 4 this weekend to occupy the area recently vacated by Astronautics personnel. The consolidated general drafting groups are being moved out of the second floor of Bldg. 19 and the southwest mezzanine of Bldg. 1.

Next Friday (March 13) transport group of Dept. 15 will move home from the third floor of Bldg. 51 to its newly-remodeled area on the second floor of Bldg. 19.

Other moves the same weekend will see about 250 personnel and equipment of engineering electronics and computer laboratories going into temporary quarters in the east end of third floor, Bldg. 5.

Also moving to the third floor of Bldgs. 5 and 51 will be 200 people of checking, release, producibility, change authority administration, central planning and estimating, and Model 8 project office.

Going to a different area on the second floor of Bldg. 5 are 30 procedures, data processing, and engineering test lab administration office people. Twenty-five drafting stations will be moved to another area on Bldg. 51's second floor and 17 people of engineering electronics lab purchasing support will be located on the southwest mezzanine of Bldg. 1.

Williamson Upsets Broadway in Shoot

Joe Williamson (Dept. 401) broke a skein of B. L. Broadway (Dept. 603) pistol master class wins Feb. 22, edging the perennial favorite by one point with a 292 score.

In the center fire short national event Broadway and Williamson exchanged point for point with match ending in deadlock, each tallying 268.

Other first place winners were R. D. Miller (Dept. 600), expert class; A. L. Bishop III (son of Ash Bishop, Dept. 401), sharpshooter; and Arley Utter (Dept. 129), marksman. Jim Halfacre (Dept. 180), snagged third in national event with score of 255.

40,000th 'Student' Graduated From Security Classes at SD

Convair SD security classes last week "graduated" the 40,000th student.

It is a milestone in a continuing four-year program involving more than 700 refresher and indoctrination classes to keep Convair personnel abreast of changing security procedures and to systematically indoctrinate new employees.

Obvious examples of these changes is a new color code for secret and top secret clearance cards (**Convairiety**, Dec. 10, 1958). Distribution of cards (red for secret; purple for top secret) which affected almost 9,000 Convair SD holders, is almost completed.

"Naturally, our job extends into all matters falling into the realm of security," R. G. Glick, supervisor of security and investigation, said.

"But the main concern in our training program is to insure that individuals understand the security aspects of the job they perform."

To a greater or lesser degree, security's success depends on everyone, from the stenographer who mails classified information to the supervisors and engineers who use it.

"The myriad of rules in the area of classified information alone—transmitting, storing, destroying, reproducing—requires the constant vigilance of everyone," Glick said.

Keeping pace with changes within the plant itself and new problems they sometimes cause must also be coped with.

Renovation of interior of Bldgs. 5 and 51 and partitioning of office spaces make surveillance more difficult, Glick said. Individuals there must shoulder increased responsibilities so that no one gains unauthorized access.

SD Sick Leave Cards Dropped

No more individual sick leave cards will be issued for hourly employees at Convair San Diego and General Offices after yesterday (March 3).

Sick leave due employees after March 3 date automatically will be paid in weekly pay checks upon sick leave expiration period providing that the time has not been used during the preceding year, explained J. L. Terrien, payroll supervisor at SD.

Department clerks will be instructed to return all sick leave cards to payroll section of general accounting. Blank sick leave cards will be issued so that department clerks may fill in sick leave hours requested by employees and may submit cards together with doctor's certificates to the payroll section. A running control will be kept by payroll with sick leave hours used automatically deducted from total hours accumulated, said Terrien.

Log Book Entries

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective Feb. 16.

Dept. 4-1, Material: To inventory control asst. supervisor, F. Cicalo.

Dept. 5, Master Planning: To program control administrator, W. J. Dewey.

Dept. 6, Engineering: To senior design group engineer, L. V. Clements, T. L. Heid. To asst. research group engineer, H. B. Babbitz, M. M. Chazotte Jr., C. Phillips.

Dept. 21-1, Transportation Operations: To transportation foreman, M. L. Merritt.

Dept. 25-9, Plant Engineering: To transportation asst. foreman, J. M. Bingham.

Dept. 145, 880 Wing Structure: To asst. foreman, S. S. Smyczynski.

Dept. 197-1, Quality Control: To inspection supervisor, S. Petcher. To inspection asst. supervisor, R. L. Hallahan.

Dept. 223, Welding: To asst. foreman, W. L. Berkheimer.

Dept. 230, Model 8 Forward Fuselage Section: To asst. foreman, M. Brooks, B. E. Hill, F. C. Lane, J. J. Medina, R. B. Walling Jr.

Dept. 231, Model 8 Intermediate Fuselage Section: To foreman, S. Galasso. To asst. foreman, J. R. Holmes, I. D. Howarter, R. W. McDaniel, G. G. Shoop, E. H. Sting.

Dept. 233, Model 8 Wing & Tail: To asst. foreman, R. F. Friar, J. D. Rabe, L. P. Smith.

Dept. 288-0, Inspection, Plant 2: To inspection general supervisor, F. B. Shockley.

Dept. 600-1, Tooling, Plant 2: To tool project supervisor, D. A. Irons.

Dept. 603-6, Tool Manufacturing: To asst. foreman, O. D. Phillips.

Births

SAN DIEGO

CLARK—Son, Richard Ivan, born Jan. 22. is at home with his new parents, Mr. and Mrs. Michael V. Clark, Dept. 3-6.

GALPIN—Daughter, Myrna Lynette, 7 lbs., 10 oz., born Feb. 16 to Mr. and Mrs. Walter Galpin, Dept. 600-1.

HINE—Daughter, Jerry Lynn, 7 lbs., 5 oz., born Feb. 5 to Mr. and Mrs. Wayne Hine, Dept. 180.

HOOKS—Son, Paul Wayne, 8 lbs., born Feb. 21 to Mr. and Mrs. J. L. Hooks, Dept. 102.

ISABEL—Son, David Allen, 7 lbs., 8 oz., born Feb. 19 to Mr. and Mrs. J. F. Isabel, Dept. 3-6.

MOBLEY—Son, Garron R., 12 lbs., 8 oz., born Feb. 10 to Mr. and Mrs. D. E. Mobley, Dept. 6.

SMITH—Daughter, Dawn Melody, 7 lbs., ½ oz., born Feb. 14 to Mr. and Mrs. D. C. Smith, Dept. 406.

SPREHE—Daughter, Victoria Lynn, 6 lbs., 10 oz., born Feb. 14 to Mr. and Mrs. Richard Sprehe, Dept. 25-4.

SULLIVAN—Son, Rodney, 8 lbs., 6 oz., born Feb. 1 to Mr. and Mrs. J. J. Sullivan, Dept. 171.

WAMSLEY—Twin daughters: Theresa Anne, 5 lbs., 14 oz., and Trina Marie, 6 lbs., 2 oz., born Feb. 15 to Mr. and Mrs. Virgil P. Wamsley, Dept. 204.

Service Emblems

SAN DIEGO

Service emblems due during the period March 1 through March 15.

Thirty-year: Dept. 188-0, H. V. Atkinson.

Twenty-five-year: Dept. 14-1, F. A. Rosso.

Twenty-year: Dept. 200, E. L. Williams; Dept. 215, Andrew Anderson.

Fifteen-year: Dept. 3-1, R. B. Purdy; Dept. 6-32, H. J. Alter; Dept. 102, J. C. Huff; Dept. 123-0, W. V. Ohland; Dept. 139, Rudolph Casados; Dept. 146, Elmer Abernathy; Dept. 171-0, H. F. Mustain; Dept. 406, Farrell Washburn; Dept. 600-5, W. J. A. Allison.

Ten-year: Dept. 6, A. F. Burns, O. F. Oldendorph, D. W. Sonheim; Dept. 14, Stella J. Handley, W. M. Warren; Dept. 15-5, J. W. Hudson; Dept. 31, B. C. Irving, J. D. Pickett, O. N. Wilson.

Dept. 135, W. R. Nemshack; Dept. 138, J. T. Lewis; Dept. 160, W. J. Wagner; Dept. 188-1, Helen R. Jenks; Dept. 215, Alla W. Lewis; Dept. 232, J. H. Covey; Dept. 267, Alvin Fearn; Dept. 288-5, L. S. Laframboise; Dept. 292-6, J. P. James, Elizabeth E. Williamson; Dept. 403, C. G. Gilbert; Dept. 600-2, L. E. Laffen.

Personals

SAN DIEGO

We wish to express sincere appreciation to our many Convair friends who donated blood and were so generous and cooperative in other ways when our son had his heart operation.

Winnie Musselman, Dept. 188-5
Floyd Musselman, Dept. 197

* * *

I wish to convey thanks to Dept. 406 personnel for their kind considerations during my illness.

C. E. Creel

* * *

We are deeply grateful to employees of Convair, for those who acted as pall bearers, for the many expressions of sympathy and generosity, and for the beautiful flowers sent when we lost our husband and father, Charley Ray, Dept. 25. Our heartfelt thanks to you all.

Iva L. Ray and family

Retirements

SAN DIEGO

ALLEN—George C., Dept. 216. Seniority date, Sept. 19, 1950, retirement effective Feb. 20, 1959.

RATCLIFFE—R. G., Dept. 188. Seniority date Oct. 7, 1947, retirement effective Feb. 13, 1959.

THOMPSON—V. B., Dept. 145. Seniority date Jan. 24, 1951, retirement effective Feb. 6, 1959.

Deaths

SAN DIEGO

GREEN—Samuel F., Dept. 204. Died Feb. 13. Survived by wife, Allie; a son, Paul G. Green; daughter, Mrs. Doris LaRusso; and one brother.

ORR—Fred C., Dept. 288. Fatally burned in home fire, Feb. 22. Survived by wife, Lucille Orr.

PARKER—Bertrand E., Dept. 31. Died Feb. 12. Survived by wife, Adelaide M.; two daughters, Mrs. Robert H. Schmidt and Mrs. Goeffrey C. Moshier; two sons, Christopher and Peter Parker; four grandchildren.

Fun Show Set For SD Riders

Riding Club members at Convair SD have scheduled their first fun show of the season, with special incentives for juniors, March 15 at Palomar Stables, Mission Valley.

C. L. Pogorel, co-commissioner, said the event which starts at 9 a.m., is especially aimed at junior participants (17 years and under) and that they would not be charged any entry fees.

V. V. "Cowboy" Thomason, show manager, said the show has a well-rounded program, with 18 events, trophies, and ribbons for winners through tenth place.

It is open to all Convair SD Riding Club members, Convair employees and invited guests. A 50-cent entry fee has been set for adults.

Pogorel said the show is a good occasion for juniors taking riding lessons and those with little show experience to prepare for bigger events. More information may be obtained by calling Thomason, ext. 1047, Plant 1.

Pomona 'Steppers' Invite SD, Astro

Square dancers from Convair SD and Astronautics have been invited to the annual all-Convair square dance roundup in Pomona this Friday (March 6) at the Palomares Community Center.

The Pomona "Convairiety Steppers" are hosting the dance which starts at 8 p.m.

Dance Ticket Sales Start

Tickets for the annual Convair SD Management Club Spring Dance are now on sale from department representatives.

Sponsored by quality control and plant engineering, the dance will be held in Caribbean Room of El Cortez Hotel March 14.

Social hour starts at 7 p.m.; prime rib dinner will be served at 8. The orchestra of Merle Carlson will play for dancing.

L. W. Fitzgerald, publicity chairman, said tickets, priced at $6 per couple, should be obtained through representatives. He said they would not be available at the door on the night of the dance.

Handling arrangements are T. W. Brotherton and R. F. Missman, co-chairmen of sponsoring departments. B. R. Hisaw is in charge of the raffle.

Talk, Film, Slated For Garden Meeting

Members of the Convair SD Garden Club will see a film and hear a talk presented by R. A. Field at the March 11 meeting, 7:30 p.m., in the Floral Association Bldg., Balboa Park.

Field, representative for Ortho products in the San Diego area, will bring timely and pertinent information to all gardeners, said E. L. Zimmerman, CRA commissioner. A question and answer period will follow the program.

Plans will be under discussion for the coming Convair Rose Show slated for April 19.

Everett Henderson, club president, represented the CRA group at the Pacific Southwest Dahlia Conference held Feb. 21-22 at El Cortez Hotel.

SD's Etienne Dormoy, Air Pioneer, Dies

Etienne Dormoy, one of the earliest pioneers in aviation both in Europe and the United States and a Convair SD man for 22 years, died in a San Diego hospital last Saturday (Feb. 28).

Born in Paris, France, in Feb. 10, 1885, Dormoy was a 1908 graduate of the Sorbonne University and held an electrical engineering technical degree from Lille. By 1912 he had designed the first monocoque fuselage made by bonding thin plywood sheets over a form.



Etienne Dormoy

During the first World War he piloted French army bombers until he was released to design the famous Spad pursuit plane. He was brought to the United States in 1917 by the U. S. Army Signal Corps to build Spads for this country.

Dormoy joined Convair at San Diego in 1936 as a design engineer. He retired just a year ago, in February, 1958.

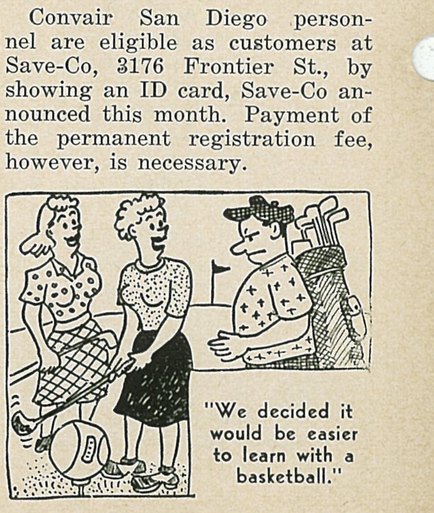
He is survived by his wife, Phyllis, and a daughter.

NURSES ELECT CONVAIR TRIO

Helen Werdelman, Convair SD nurse, has been elected president of the San Diego Industrial Nurses Association. Other officers from Convair SD are Bea R. Chesbro, treasurer, and Margaret Gaily, secretary.

CONVAIR ELIGIBLE FOR SAVE-CO

Convair San Diego personnel are eligible as customers at Save-Co, 3176 Frontier St., by showing an ID card, Save-Co announced this month. Payment of the permanent registration fee, however, is necessary.



"We decided it would be easier to learn with a basketball."

Early Entry Urged for Keglers In 18th Annual Championships

Convair San Diego bowlers entering the 18th annual championship tourney April 18-19, 25-26 and May 2-3 at Pacific Recreation are urged to sign up as soon as possible.

Jim Hayman, CRA commissioner, said absolute deadline on entries is March 29. However, keglers were advised to make reservations and money deposits before March 20 to be assured of accommodations. Taking reservations are Catherine Hayman, HO-6-1262 and Frances Brooks, HO-9-8793.

Entry blanks are available at employee services, Plant 1, at Pacific Recreation and from members of the tournament committee.

Contrary to past procedure, Hayman said, five sanctioned bowlers may form a team and enter without payment of additional membership dues as formerly required.

In addition, players desiring to, may play on more than one team but should indicate this fact on each entry form they fill out. But Hayman added this holds only for keglers who were team members during regular league play.

Tourney events will include team competition, singles and doubles, and a special all-events bracket.

Other rules for qualification are: only one entry allowed in doubles and singles; doubles only and singles only will not be accepted; women's teams will compete in mixed division rather than separately.

Ratio for prizes will be one for every five bowlers.

Winners of last year's tourney, in which 475 keglers competed, are expected to be on hand—with the exception of those now at Astronautics, Hayman said.

Radio Classes Twice Weekly

A new schedule of classes for the Convair SD Radio Club went into effect last week and the group will meet twice weekly—Tuesdays and Thursdays—until conclusion of code classes.

Tuesday sessions will start at 6:30 p.m., and will be devoted to novice code copying (continuous words from text) to enable students to get in sufficient practice.

Thursday classes which get under way at 6 p.m. include mental reinforcement code drill, keying drill, standard FCC tests and theory classes for novice and general licenses.

Club headquarters on Harbor Drive have been rigged for sending code from classroom seats. Novice and technician exams are taken at 7:15 p.m. Thursdays. Instructor is Ed Warns of the CRA Radio Club.

Community Center New Hoedown Site

Convair SD Hoedowners will hold their Saturday night party dances at a new location—University Heights Community Center, 4044 Idaho St., P. E. Liggett, commissioner, announced.

First dance change will apply to is the March 28 party night. Liggett pointed out the Community Center location is a larger building with better facilities (hardwood floor, more parking) than American Legion Hall formerly used.

Liggett indicated more changes for other square dancing activities are in offing but said ample notice will be given.

50 ENTER DEPT. 266 SHUFFLEBOARD PLAY

Winners of a shuffleboard tourney in SD Dept. 266 were announced last week by its CRA representative, Ralph Cirillo. John Monette took first and Bill Moore second in Class "A." In Class "B," Fred Baldwin and Ed Brannon were ranked one-two. The tourney attracted 50 entries.

Judo Instruction Now Twice Weekly At Federal Bldg.

Organization and development of a group interested in judo instruction at Convair SD has progressed rapidly.

Pete Beyrer of the CRA office said 50 students showed up for last week's session and that a slate of officers was elected by the newly-formed group.

Taking office were Bill Kishi (Dept. 6), president; Bob Westerwick (Dept. 6), vice president; and Ray Missap (Dept. 25), secretary-treasurer. Instructors (also from Dept. 6) are M. Masaki and E. Morrell, both of whom are experienced judo teachers and hold belts of varying rank.

Classes for the group will be held twice a week, every Wednesday and Thursday, 7-8:30 p.m., in the Federal Bldg., Balboa Park. A 25¢ fee will be charged for each lesson. New students are not required to wear regular judo uniforms but are advised to wear gym-style clothing (sweatshirts, levis, etc.)

Eligible to join are all Convair employees and dependents over five years of age. Membership cards (50¢ for adults; 25¢ for children under 16) are available at classes. Future plans call for competitive meets with other clubs in the area.

450 CAPACITY SET FOR DINNER DANCE

The fifth annual dinner-dance, sponsored jointly by the Convair SD and Astronautics Fishing, Boating and Gun Clubs, will be held March 21 at the Veterans' War Memorial Bldg., Balboa Park.

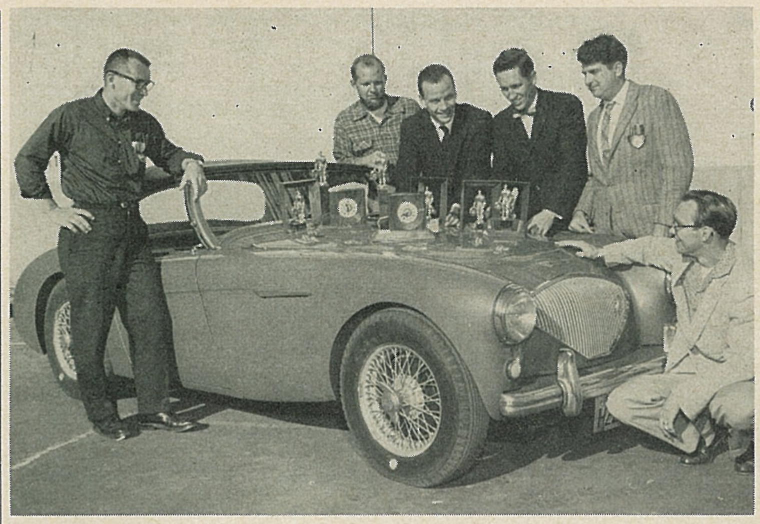
Last year 375 attended the event at the Park Blvd. and Upas St. location. Chairman Joe Aguilar said advance response indicates another near-capacity attendance. Tickets ($1.50 for adults; 50c for children) are now on sale at employee services. Sales are limited to 450, capacity of hall.

Dinner is at 6:30 p.m., dancing begins at 8 p.m., soon after drawing to determine door prize winners.

Astro 'Space Primer' On Sale for 10 Cents

The booklet "Space Primer," an introduction to astronautics, is available to Convair SD employees now at Plant 1 and 2 employee services at 10 cents each.

Prepared by Convair Astronautics Division, the booklet explains and illustrates origin and fundamental laws governing the science of space flight.



TOP DRIVERS—Convair SD winners of Don Diego rally, San Diego's biggest sports car event, are from left: Tom Kienholz, Dick Mobraaten, Dick Bauer, Bob Dunn, Dick Elms, and Bill Newbery (all Dept. 6). Not shown is George Andert (Dept. 6), navigator of car which placed 12th.

CRA Sports & Recreation Convairiety

Two Convair Teams in Line For City Hoop Championships

Two of three Convair SD basketball teams entered in city competition look like "favorites" for league titles as they go down the home stretch.

Foremost is tough Tool Manufacturing entry in Industrial "A" league which is assured of at least a tie for the title. Unbeaten in league play, they can clinch the title this week with another victory.

The Convair Girls' team boosted their record to six victories against no losses during the past two weeks, bouncing the Foul Outs, 57-33, and wrecking a Christ Lutheran team, 60-13. On March 12, the local entry will replay a protest game with T.O.T.s, winner of which will most likely be named league champion.

In the City "A" league which concluded play last week, the Convair Eagles ended up near the bottom. But not before they threw scares into league favorites by jumbling the standings with three victories during the last three weeks.

In shop league competition the leading Manufacturing Control team was entrenched even more firmly in first place this week after whipping 603 Tooling, 53-34, and Dept. 6 Electrical, 46-33. Ranked second is Dept. 6 Flite Test with record of five wins and two losses. Electrical is third with record of 4 and 3, but two of their losses were at hands of league leader.

SD Divers Second In Regional Meet

A trio of Delta Divers from Convair SD placed second in the A.A.U. Regional Spearfishing Meet last month at La Jolla Cove.

Tom Richardson, commissioner, said that although meet was held in rain and cold weather, the sea was calm and underwater visibility excellent.

CRA team members were Allan Jones, Bob Casebolt and Chuck Nicklin. They caught a combined total of 28-lbs., 6-oz.

SD, Pomona Teams To Clash Saturday

Annual inter-division basketball games with Convair Pomona will be played this Saturday (March 7), starting 7 p.m., Muni Gym, Balboa Park.

The SD Tool Manufacturing team is scheduled to meet Convair Pomona's civic league entry and shop league winners of each division will play each other.

FLYING HILLS SITE FOR RIDE, FUN SHOW

Riders from Convair SD will again join ranks with the Flying Hills group March 8 for a breakfast ride and fun show. Saddle-up time is 8:30 a.m. at the Flying Hills Ranch in the Fletcher Hills-El Cajon area. Fun show starts 10:30 a.m.

Convair Drivers Win Don Diego; Beat 301 Teams

The "World Series" of San Diego sports car racing — the ninth annual "Don Diego Rallye" —for the third time in four years was won by a Convair SD team driving under CRA colors.

And out of the 301 cars entered in the rallye (including some of the top driver-navigator teams from Los Angeles) three other Convair SD Dept. 6 teams placed in the top 15.

Taking home a car full of trophies for top honors in the Feb. 22 rally, the biggest ever held in San Diego, were driver Dick Bauer and navigator Bob Dunn.

In fifth place and also winners of best novice event were Tom Kienholz and George Kendall of of Astronautics. Bill Newbery and George Andert were ranked 12th and Dick Mobraaten and Dick Elms placed 13th.

Now that the dust has settled the club will conduct a post-mortem panel discussion tonight (March 4), 7:30 p.m., Museum of Natural History, Balboa Park. Guest speakers will be Bill Rector and George Blondin of Astronautics, who were also among top 10 finishers in Don Diego.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

BADMINTON — Tournament March 7-8, Federal Bldg., Balboa Park. Organized play and instruction every Tuesday, 7:30 p.m., same location.

BASKETBALL — Inter-division games with Convair Pomona March 7, starting 7 p.m., Muni Gym, Balboa Park.

BOWLING — Entry blanks for SD championship tourney April 18-19, 25-26 and May 2-3 available at employee services, Plants 1 and 2.

BRIDGE — Next SD session March 17 is master points play. Last SD session of month on the 31. Astro nights March 12 and 26. Play starts 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse.

FISHING AND GUN CLUBS —Dinner-dance March 21, 6:30 p.m., Veterans War Memorial Bldg., Balboa Park.

GARDEN CLUB — Meeting March 11, 7:30 p.m., Floral Assoc. Bldg., Balboa Park.

JUDO—Instruction every Wednesday and Thursday, 7-8:30 p.m., Federal Bldg., Balboa Park.

MOVIES — Reduced-price movies each Friday night at Academy Theater, 3721 University Ave. March 6—"From Here to Eternity" and "The Strange One." March 13—"Hatful of Rain" and "Fort Dobbs." Admission: adults, 25¢; children, 10¢.

RADIO CLUB — Code classes held twice weekly, Tuesdays, 6:30 p.m.; Thursdays, 6 p.m., at club headquarters on Harbor Drive. Regular meeting tomorrow, (March 5) 7:30 p.m.

RIDING CLUB — Fun show March 15 starting 9 a.m., Palomar Stables, Mission Valley.

ROLLER SKATING—Monthly skate night Monday (March 16), Skateland, Front and G Sts., 6:30-9:30 p.m. Free tickets at employee services, Plants 1 and 2.

SPORTS CAR CLUB—Meeting tonight (March 4), 7:30 p.m., Museum of Natural History, Balboa Park.

SQUARE DANCING — All-Convair dance March 6, 8 p.m., Palomares Community Center in Pomona. Party night March 28, 7:30 p.m., at new location—University Heights Community Center, 4044 Idaho St.

WOMEN'S ACTIVITIES — Tickets on sale for Ind. Rec. Council fashion show, March 11, 8 p.m., U. S. Grant Hotel, at $1 each at SD employee services, Plants 1 and 2, Rose Canyon, Fordham St.



FIRST TIME—Button award winners of the Convair SD Fishing Club were first to meet in new Gillespie Field CRA Clubhouse. Some work remained to be completed on structure, but members were happy to use facility and bask in warmth of newly-installed fireplace. From left (sitting): Earl McDaniel (Dept. 31), D. R. Bryson (Dept. 102), W. L. Mundell (Dept. 573), L. R. Davidson (retired), Mr. and Mrs. R. W. Menzie (Dept. 31), and Mrs. Viola Davidson (Dept. 772). Standing are Ralph Brehl (Dept. 25) and Howard Davidson, husband of Viola Davidson.



TAXI?—Huskies and sled show up on arrival of F-106 at Eielson AFB after a cold weather test hop, offering contrast in modes of travel. Aircraft has been in Alaska since January, demonstrating how it operates despite sub-zero cold.

'Royal Order of Raw Dealers' Will Welcome New Members

Convair Fort Worth and Air Force people assigned to "Operation: Raw Deal" in Alaska will soon be awarded special certificates of membership into the "Royal Order of Raw Dealers."

The certificates are being sent to Maj. K. K. Lewis, Air Force project officer and B-58 pilot, and Harold Dunlavy of Convair's customer service.

Printed on ice-blue paper, the certificates will be awarded for



RAW DEALER — Maj. K. K. Lewis, pilot of B-58 undergoing cold weather tests in Alaska, will be among Convair Fort Worth and Air Force people initiated into "Royal Order of Raw Dealers."

the B-58 cold weather tests to "the chosen, frozen few."

The proclamation starts out as follows:

"Be it known to all dog sled operators, igloo builders, bar maids and others of high position and influence, that on this .... day of .... 1959, there appeared in my presence one, ..., gorgeously attired in muk-luks, oil-stained parka and frost-bitten ear lobes: and after all due deliberation, the aforementioned is declared a member in good standing, within the confines of this most select and coveted order, and is further designated as being TDY and CWT.

(TDY means temporary duty, CWT stands for cold weather tests.)

"Furthermore, be it known that when the bearer of this certificate has made the last permanent change of station, he is entitled to eternal occupancy of the south side of paradise, for, verily, he hath served his hitch in the desolate, frigid wastes of purgatory."

The document is signed by the Majestic-Raw-Deal-Wheel and witnessed by the Exalted Chilled Chief Cog.

"Operation: Raw Deal" is scheduled to be complete this month.

Air Force and Convair people assigned to the cold weather tests on the supersonic B-58 Hustler departed Fort Worth last November.

The B-58 being tested was flown up by Major Lewis, with Maj. Jim Zwayer and Capt. Perry Amidon riding in the second and third canopys respectively.



NOMINATED — Capt. Tom Bogan, F-106A pilot in Alaska, has been tabbed for possible role as one of first U.S. "space men."

F-106 PILOT RELIEVED, MAY GET SPACE ROLE

Capt. Tom Bogan has been relieved by Capt. Harold K. Wimberly as pilot of the F-106A now flying cold weather tests in Alaska.

Captain Bogan recently received orders to report to his unit at Wright-Patterson AFB, Ohio. According to press reports, he has been selected as one of a group of airmen to be screened as a possible pilot of the first U.S. space craft.

McGuire, Geiger and Andrews AFBs Scheduled To Receive First F-106s This Summer

First F-106 squadrons will be activated at three Air Force bases by early summer, according to an announcement from Air Defense Command headquarters.

A release from the Free Press, Colorado Springs, Colo., newspaper, on Feb. 20 said that location for the first three squadrons of Convair F-106 fighters will be at McGuire AFB, N.J.; Geiger AFB, near Spokane, Wash.; and Andrews AFB, near Washington, D.C.

The all-weather jet interceptors will carry Falcon missiles and will be able to load the air-to-air rocket with atomic warhead, the Genie, while in flight.

Lt. Gen. J. H. Atkinson, ADC commander, was quoted as saying that the F-106 is a "step forward in the program to give North American Air Defense Command increased capability in intercepting hostile planes well away from potential targets."

ADC officials said that other bases for the F-106 would be announced at a later date.

880, With Colors Flying, Passes First Phase of Rugged Structure Test

First major part of the structural test series being conducted on the second Convair 880 jet transport has been concluded satisfactorily at San Diego.

Plane No. 2 now is in the midst of an extensive five-month testing program at the $2 million structural test facility at the seaplane ramp to qualify the 880 for FAA approval.

"The tests just completed proved out better than any we've ever run," commented W. E. Wise, group engineer in charge of the structural test lab program. "We had fewer problems and were able to complete the series in a shorter period of time than anticipated. In fact, the 880 structure looks better under load than any plane we've put through the test program!"

In the ground tests to check out the structural design the whole plane is put under loads to simulate the most critical flight conditions at various altitudes and speeds. Strain is applied to each part of the plane to test it under the most trying conditions that might exist.

In the series just completed, the plane withstood critical side bending maneuvers such as might be encountered in heavy gusts of air at an altitude of 35,000 ft.

In the second portion of the program, to start next week, stresses on the tail will be measured during conditions simulating an engine out or a side slip.

Production pods and pylons with dummy steel engines will be fitted to the plane by then for later testing.

Loads, applied to the plane by means of hydraulically-controlled whiffletrees, are adjusted from a central control room adjacent to the hangar. Measurement of stresses and other test data is recorded on automatic instruments and effects of loads can be watched by closed circuit TV. Dick Haney, test conductor, directs the testing operations from the hangar.

Engineering crew conducting the test program is under direct supervision of A. R. Vollmecke, assistant group engineer in charge of 880 structural tests.

Flight testing of plane No. 1 and ground tests of plane No. 2 are destined to be finished at the same time—in late summer of this year.

Control systems on plane No. 2 were checked out by dynamics and structures lab groups of engineering before the first 880 took to the air on its first flight in January.

AMC Liaison Office Created at Warren

Establishment of an Air Materiel Command Liaison Office (AMCLO) at Warren AFB, Wyoming, to provide contract and logistic support for Atlas ICBM weapon system has been announced.

The AMCLO at Warren will be headed by Maj. James Thornton. Primary function will be contractual administration of ballistic missile contractors performing within the Warren AFB geographic area.

Other AMCLOs serving the ballistic missile program are located at Patrick AFB, Vandenberg AFB, Edwards AFB, and Holloman AFB.

Frank Pace Queried On Who's His Boss

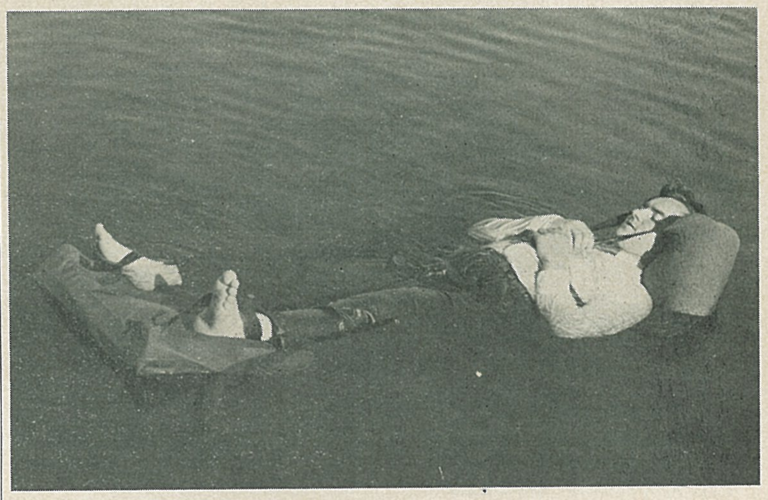
Frank Pace Jr., in San Diego on business last week, arrived in the General Atomic Division lobby in advance of the time he was expected and announced to the receptionist that he wished to see Dr. Frederic de Hoffmann, division general manager.

"Name, please?"

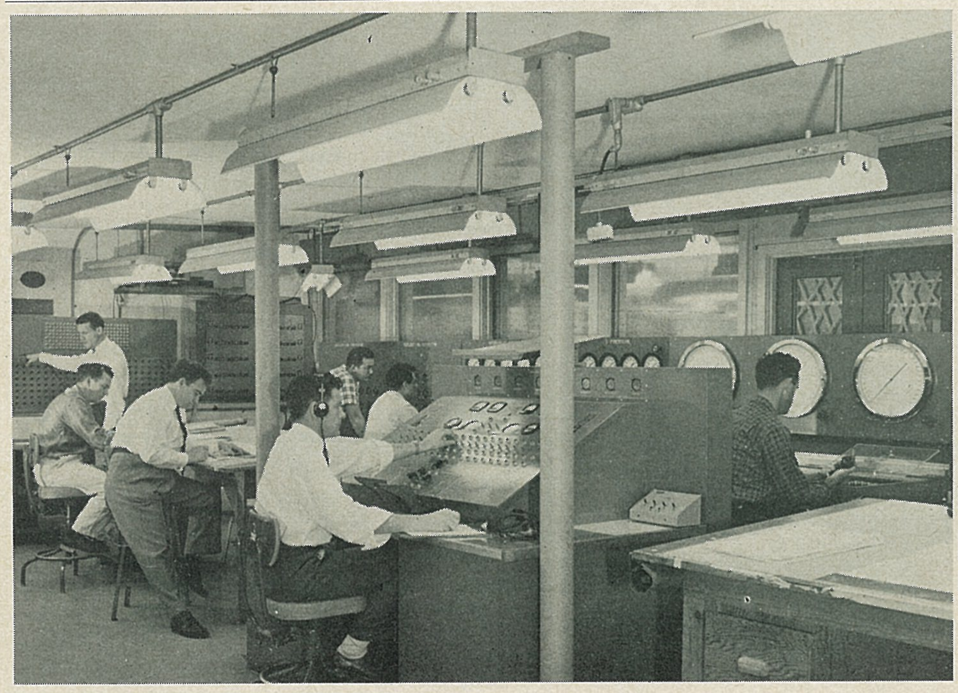
"Frank Pace."

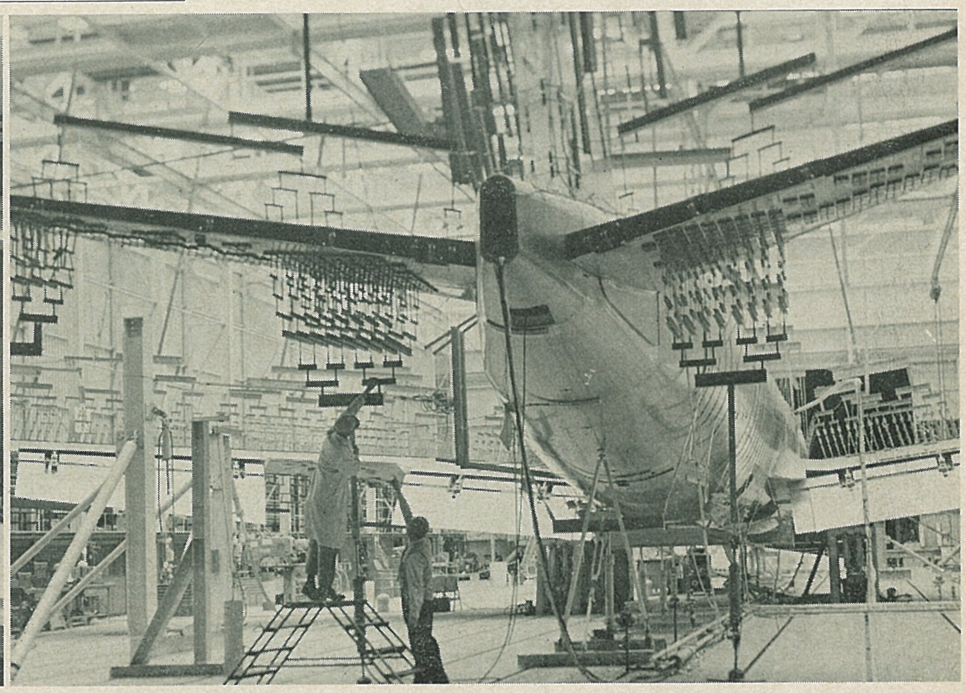
"Who do you work for?"

With a half-smile he explained he is president of General Dynamics Corporation.



REALISM—Obed Bobbitt of SD structural test lab engineering group went all the way in flotation tests for jet 880 cushions. Here plays role of ditched passenger, clothes and all.





SECOND 880 "FLIES"—Second Convair 880 off the line "flies" while anchored down in structural test program at San Diego seaplane ramp hangar. At left Dept. 6 structural lab men adjusting loads and measuring test data in central control room are (left to right) D. O. Whitney, A. W. Hamrick, Obed Bobbitt, R. J. Haney, R. H. Holland and S. S. Sifuentes in background, and R. A. Sherman at far right. In right photo Convair SD mechanics adjust whiffletrees that put load on plane.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

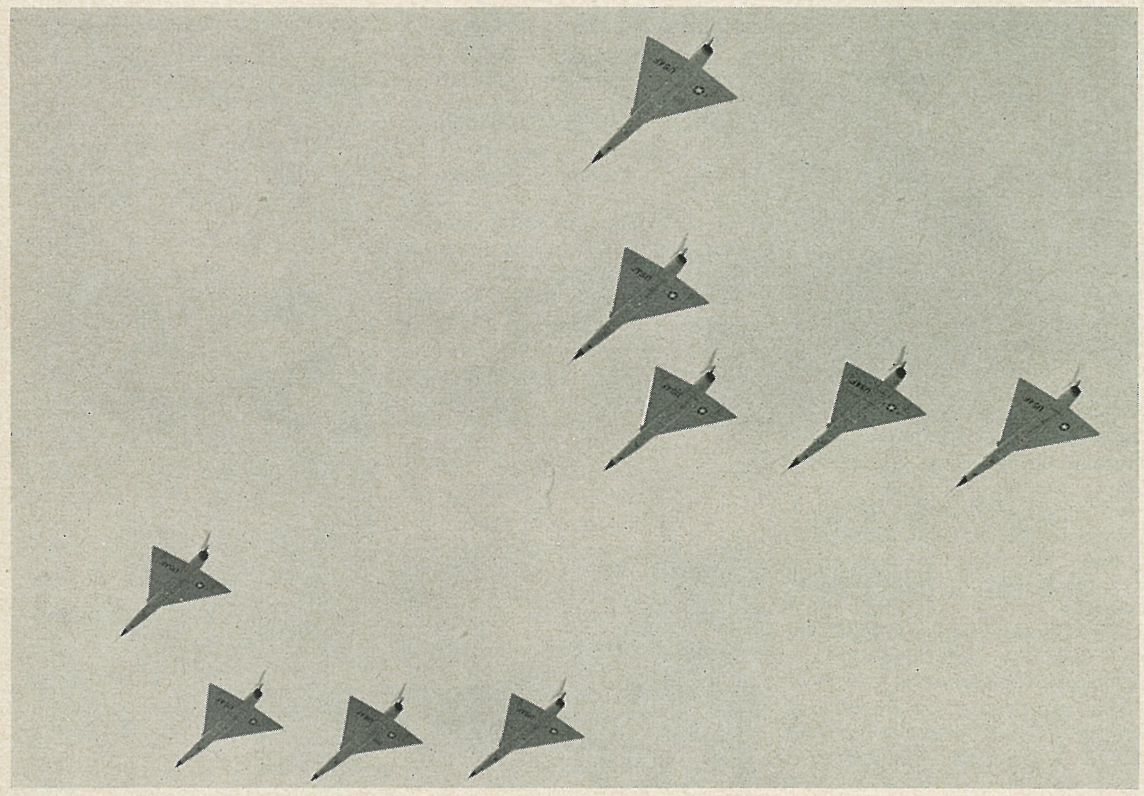
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Astronautics EDITION

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Astro news office, Kearny Mesa plant, ext. 1154. Vandenberg news contact, ext. 8-4148. AFMTC news contact, ext. 3038.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



RARE SIGHT—This is first photo of F-106s in formation flight. It was taken at Air Force Flight Test Center, Edwards AFB, where ships are undergoing flight performance evaluation. Flybys included one at Palmdale facility.

Despite Test Status, F-106s Fly Formation

Nine Convair F-106s performed low-level formation flybys over Edwards Air Force Base recently in the largest formation flying of the newest Convair jet interceptor performed thus far. They also flew formation over the Palmdale facility and over the GCI Radar Site, Boron, Calif.

The Air Force jets, now undergoing flight performance evaluation with the F-106 Joint Test Force headed by Col. Carl A. Ousley, were said to be the first aircraft to appear in such a large formation while still in flight test status.

The hour-long formation flight, made at wing tip clearance, demonstrated the tactical effectiveness of the F-106 and provided basic data on formation capabilities of the aircraft.

Helping the Air Force complete Category 2 (systems evaluation) tests are Convair people from Edwards, Palmdale, and San Diego. The Convair group now numbers about 58 mechanics plus 30 instrumentation and customer service people.

D. J. Mancusco represents Convair on the joint staff and Dean Marks is senior field representative from customer service.

There are now 15 F-106s, including both A and B models, housed in the area—largest number to date. Convair mechanics, working under AF direction, support the program by modifying airplanes in compliance with technical orders.

Many of the customer service representatives are expected to accompany the F-106 jet interceptors to McGuire AFB, N. J., where they will enter the Category 3 test phase (squadron strength development of weapons system) early in June. Others of the Convair group are scheduled to remain at Edwards for follow-on testing.

Convair Team In Okinawa to Assist F-102As

(Picture on Page 2.)

First Convair F-102A jet interceptors to go to the Pacific area arrived at Okinawa the first part of this month, according to Pacific Air Forces headquarters.

The Convair-built aircraft have been assigned to the 51st Fighter-Interceptor Wing of the 313th Air Division. They have been assembled at Naha Air Base, Okinawa, where they will be flown by pilots of the 51st's 16th Fighter-Interceptor Squadron commanded by Maj. Charles F. Foster.

According to Brig. Gen. Dale O. Smith, commander of the 313th Air Division, the F-102As will be a major augmentation to the air defense of the Ryuku Islands and the Far East generally.

For the past several weeks pilots and maintenance crews of the 51st Wing have been briefed in the operation of the interceptor through use of a mobile training unit and classroom instruction.

Col. Lester R. Johnson, 51st Wing commander, became proficient in the aircraft while on temporary duty in the U. S.

Facilities of Naha Air Base have been expanded to provide base support for the new jets.

Heading up Convair's team assigned to the support of the F-102s in the Pacific is Rudy Haas, field service area supervisor of the Far East, stationed at Fuchu Air Base near Tokyo, Japan.

At Naha Air Base, Okinawa, are Les Holz, Harry Hattel, Mike Mulick, Cal Kosen, Jack Gundaker, and Ed Gross, all SD field service representatives, and James Sexton, service parts representative.

A public display of the jet interceptors is planned soon, at the time the planes become operationally ready.

Boehm Will Speak For AIEE Chapter

Barry W. Boehm, research engineer at Convair Astronautics, will speak at 7:30 p.m. March 26 before a meeting of the local chapter, AIEE, gathered at the Naval Electronics Laboratory.

Boehm will discuss "Use of an Electronics Digital Computer in Engineering Problems." The meeting is open to all Astro employees and guests. C. L. Hitney, ext. 2324, Astro plant, will supply further details.

Bayless Named Director For All Engineering

Ralph L. Bayless, chief engineer of Convair SD, has been appointed Convair director of engineering, J. V. Naish, president of Convair, announced.

In his new assignment Bayless will report to R. C. Sebold, Convair vice president-engineering. He will supervise engineering activities in all Convair divisions.



R. L. Bayless

William W. Fox, assistant chief engineer of the SD Division, replaces Bayless as chief engineer, reporting to B. F. Coggan, Convair vice president and SD Division manager.

Richard P. White, former chief technical engineer, is now assistant chief engineer for product design, replacing Fox.

In announcing Bayless' assignment, Naish said that the new post of director of engineering was created to give additional strength at top management level to the company's expanding engineering activities.

(Continued on Page 2)

Art King New President Of CRA, Johnson Is Veep

Convair Recreation Association at Astronautics last week elected two new officers and returned two others to office for the coming year.

Elevated to president was Art King (Dept. 150). He has been vice president. Ezra Johnson (Dept. 771) was elected vice president. Returned to office for another turn were Jack Boyle (Dept. 321), treasurer, and Joe Frivaldsky (Dept. 130), secretary. King succeeds Art Munson, Astro CRA's first prexy.

Voting at the March meeting were members of the CRA Employees' Council who also cast secret ballots for the "CRA Man of the Year." Results of this selection will be made known April 4 at a dinner honoring the CRA Council staged by Astronautics management. The honor is intended to go to the man the Council feels has done the most for CRA during the past year.

Candidates this year are Johnson, John Leib (Dept. 500), Willard Brassell (Dept. 500) and F. W. Augustine (Dept. 500).

King's service to recreation dates back prior to the formation of the Astro CRA organization. He first shared work involved in staging joint Astro-San Diego golf events, then established a separate Astro golf group. He was an initial member of the Astro CRA Council and its first vice president.

A former San Diego City (three times) and County (twice) golf champion, King also once won the Southern California Open. He served for three years as a professional and has been participating in golf activities in the San Diego area for almost 35 years.

Johnson is also another charter member of the CRA Council. Prior to its formation, he was a very active member of the San Diego Gun Club, having helped set up a youth program and assisted in construction of the Gillespie Field shooting facilities shared by San Diego and Astro. He is a top marksman who enjoys both hunting and fishing as pastimes.

However, Johnson's greatest contribution to Astro CRA has been the direction of development of the new Astro recreational area. As chairman of the council's development committee, he has been largely responsible for lining up and assigning work tasks to various departments.

Boyle, a retired Navy chief petty officer, has directed one of Astro's most popular activities, bowling, from the start. He and Willard Brassell have handled bowling at Astro from a start of only five leagues to the present 23 leagues. As treasurer Boyle has also assisted Astro CRA in moving from an organization with limited funds to one well in the "black" while still supporting all activities and developing the recreation area.

Frivaldsky has been associated with Astro recreation since its inception. The former Baylor University cage star, coach and sporting goods merchandiser, was hired by Astro to assist in lining up a full program of activities. He has taken an active part in most groups at one time or another. Frivaldsky is regarded as one of the top cage referees in Southern California.

Before turning the meeting over to J. R. Mitchell, Astro's chief of employee services, for the election, out-going president Art Munson expressed his thanks to all commissioners for their help during his term of office.

Mitchell also lauded the men for their support and personal contributions to CRA during a trying period of organization and growth.



CELEBRATION—Astronautics CRA last week elected a new slate of officers to serve during coming year. Time out was taken for coffee break. Seated are Art King, right, president, and Ezra Johnson, left, vice president. Pouring are Jack Boyle, left, treasurer, and Joe Frivaldsky, secretary.—Photo by Ken Rinker, Astrolens.



PROPER METHOD—Demonstration above of proper use of fire extinguishers will be repeated many times this year as Astronautics fire department instructs most factory and laboratory personnel in procedures. Some 212 people have witnessed demonstration and handled equipment to date. Last year similar program saw 895 people attending.



TAKING OFF—Five Convair SD field service representatives at SD airport just before enplaning last week for Okinawa where they will support first F-102 Pacific squadron are (left to right): Cal Kosen, Harry Hattel, Jack Gundaker, Mike Mulick, and Ed Gross.

SD's Scottish Family Robinson Are Pipers, Drummers, Dancers

There's a wee bit o' Scotland in San Diego.

Convair SD's Scottish "family Robinson" will get out the bagpipes and step off a Highland dance—as fast as you can say McTavish.

"Piping" and dancing is a never-ending job in the home of Mr. and Mrs. Charles Robinson, who both work at Convair SD.

"At least one member of the family is practicing every day," Mrs. Robinson says.

And a family effort it is. Dad, mom, and the three sons all take part.

Youngest son, 11-year-old Bruce, in only four years of competition, has won so many trophies that if stood on end they would be three times taller than he. He has appeared at the Hollywood Bowl, Disneyland and on Art Linkletter's "House Party" besides numerous competitions.

But Bruce is just like any other 11-year-old. He is more proud of two trophies won playing Little League baseball, than 14 others received in Highland Dance competition.

The older sons, Philip and Michael, have their own particular specialties. They are drummers and pipers. Their father directs the Helix high school band.

How does Mrs. Robinson get into the act?

"I have a full-time job making sure that everyone practices and that costumes are ready when needed. When I have a free moment, I make drum covers."

Bldg. 5 Floor Now Complete

Entire third floor of Bldg. 5 was to be completed and occupied by engineering personnel this week in the Bldg. 5 and 51 renovation program at Convair SD.

With completion of the Model 8 project office along the third floor's east wall, the whole floor has been remodeled, leaving the second floor the only area still "in the works."

In other moves within the SD plant, customer service transport group expects to be back in its renovated quarters on the second floor of Bldg. 19 this weekend. Supervisory offices of customer service will be located along the west wall of the area.

Today a reorganization was scheduled on the second floor of Bldg. 4 when design engineers are relocated.



SCOTTISH LADDIES—Mr. and Mrs. Charles Robinson of Convair SD pose with their dancing, drumming and piping sons: (from left) Bruce, 11; Michael, 13; and Philip, 16. Robinson directs Helix High School band.

★ Convairiety ★

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SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

SD Division Technical Library Reopens in Bldg. 15 Quarters

Convair SD educational services library reopened last week in its new quarters on the second floor of Bldg. 15, Plant 1, after being in storage since last fall.

According to H. W. Rubottom, chief of educational services, about 1,000 volumes of technical and non-technical books are available to Convair San Diego people.

Books may be checked out and taken home for a period of two weeks, explained Gloria Gonzales, librarian for the last two years. Only two books may be taken out at any one time.

Subjects range from industrial relations and supervision, including psychology as applied to management, executive development and personnel management, to books on mathematics, physics, electricity and electronics (including basic courses), and blueprint reading. There is a wide variety of books on aircraft history, structures, and power plants, as well as a limited number on flight and space travel.

Also on file are periodicals, current magazines, and company bulletins.

The library is open from 8 a.m. to 5 p.m. and the reading room open for lunch hour reading.

An additional service—the ordering of new books for educational purposes—is offered through the library at discount prices. Anyone wishing to buy books is asked to submit title, author, and publisher together with cash payment of half the price in advance.



W. W. Fox



R. P. White

Fox and White In New Posts

(Continued from Page 1)

Bayless joined Convair SD in January, 1936, as an aerodynamics engineer. He became chief of aerodynamics in December, 1939, and chief of preliminary design in March, 1943. He was appointed chief development engineer in November, 1951, and assistant chief engineer in July, 1954. He has been chief engineer of SD Division since June, 1955.

Fox joined Convair SD in March, 1943, as an engineer in the experimental flight test group. In November, 1951, he became project engineer on the XP5Y-1 and R3Y flying boats. He was named assistant chief of experimental flight in August, 1953, and in April, 1954, was assigned to the F-102 program as project engineer. He became special assistant to the division manager for the F-102/F-106 in August, 1957. He returned to the engineering department as assistant chief engineer the fall of 1958.

White came to Convair in February, 1951, as a design specialist. He was assigned to engineering structures group in May, 1952, and in December of the same year was appointed a senior design group engineer. He became a project engineer in November, 1954, and since July, 1957, has been chief technical engineer.

Machine Shop Best Astro Housekeeper

Machine shop (Dept. 731) topped the 16 reporting units in the good housekeeping report at Convair Astronautics for the month of February. Second place went to manufacturing control (Dept. 220).

Six units, machine shop, manufacturing control, trainer manufacturing, inspection, test labs and plant engineering, each garnered a first place in the safety standings for the same month.

Engineers to Teach Review Classes for August Examinations

Four Convair engineers in the San Diego area will instruct review classes through the University of California Extension for those men and women planning to take the August professional engineer's examinations.

However, interested Convair parties are reminded of an April 1 deadline for applying to take this examination. Application forms are available through Astronautics and San Diego educational services offices.

C. G. Erickson, E. M. Getzoff and P. J. Swanson of Astro and R. M. Kuhns of San Diego Division will instruct a review course titled "Mechanical Engineering Fundamentals." Also offered for review are courses in electrical engineering and structural analysis and design for civil engineers. All review courses will begin in late April at Extension facilities in San Diego.

Program Develops New Supervisors

Of the 18 who have completed the development phase of the supervisory selection and development program at Convair Vandenberg AFB facility, 10 already have received appointments to supervision.

The program is divided into a selection phase (which includes nomination, testing and interviewing of candidates) and the development phase (which involves classroom participation as well as instruction in supervisory techniques on the job).

Psychiatrist to Talk Before Astro Club

Dr. Edward Stainbrook, chairman of the Department of Psychiatry, USC School of Medicine, will speak tonight (March 18) before the Convair Astronautics Management Club.

Those attending the meeting at the Palm Room, U. S. Grant Hotel, will hear Dr. Stainbrook discuss "Ease and Dys-ease in the Organization." Quality control is sponsoring the meeting which will also feature special entertainment.

Inspection Winner At Vandenberg AFB

Dept. 576-4, inspection, won the first official monthly housekeeping and safety contest at the Convair facility at Vandenberg AFB.

The award, based on performance during January, was presented to W. H. Behrens, function head.

Three Get New Assignments at Off-Site Bases

New assignments for three men who direct industrial relations activities at off-site bases operated by Convair Astronautics were announced jointly this week by M. V. Wisdom, manager of industrial relations, and W. W. Withee, assistant chief engineer-test.

Affected are R. W. Brown, C. K. Gudgell and J. N. Remissong, all veteran Convair industrial relations men.

Brown now heads the Astro industrial relations organization at Vandenberg Air Force Base, California. He moved there from a similar post at the Air Force Missile Test Center in Florida.



C. K. Gudgell



J. N. Remissong



R. W. Brown



J. N. Mattson

Assuming Brown's old duties in Florida is C. K. Gudgell who transfers from a post at Sycamore Canyon.

J. N. Remissong, formerly of Vandenberg AFB, now administers industrial relations matters at the Missile Static Test Site, Edwards AFB, California. He replaces Y. D. Naliboff who has transferred to San Diego Division.

J. N. Mattson continues to serve at Warren Air Force Base, Wyoming.

MAGNUSON GIVEN POST WITH ASTRO

W. E. Magnuson, veteran Convair executive, has joined Convair Astronautics as assistant to E. A. Reynolds, manager of product support.

Reynolds indicated this week Magnuson will handle problems associated with providing spares for operational support of initial Atlas ICBM facilities at Vandenberg AFB.

Magnuson came to Convair at Vultee Field in 1940. He worked on the experimental XB-36 program, transferring to Convair Fort Worth in 1945. He was superintendent of fabrication there before assuming the job of Fort Worth resident office manager at Convair San Diego in 1956.

Facilities For In-Plant Banking In Effect For Astro and SD

A Convair employee deposit and loan banking plan is in effect for San Diego and Astronautics divisions.

Under the program, arranged in cooperation with the Five Points and Linda Vista branches of Bank of America, personal loans, loans for home improvements and automobile loans can be arranged in many cases without the employees leaving the plant.

In addition, interest rates are approximately one per cent less than those which would apply if the employee dealt directly with the bank.

The plan also has provisions for automatic payroll deposits in either savings or checking accounts, or both.

Personal loans can be made for amounts up to $2,500, with from six to 24 months allowed for repayment. No co-signer is required for amounts up to $300, and only the additional signature of the employee's spouse is required for amounts over $300.

For larger loans application can be made at the plant but the spouse must appear at the bank.

Home improvement loans for amounts up to $3,500, with up to 36 months allowed for repayment, and automobile loans for any amount, depending upon the age of the car, with up to 36 months to repay, can be made.

For loans up to $1,000, the entire transaction can usually be handled within the plant.

Application for loans can be made at employee services.

First of B-58 Trainers Due For April Delivery

Training devices the Air Force will use to teach B-58 crews how to fly and operate B-58 systems, as well as equipment to train support and maintenance people, will be supplied by Convair under new agreements worked out last month with the Air Force.

These will include such items as flight simulator, navigation trainer and defense system operator trainer.

C. H. Zimmerman, assistant project engineer, pointed out that the new authorization makes Convair Fort Worth weapon system manager not only for the B-58, but also for training devices which AMC has previously bought directly from manufacturers.

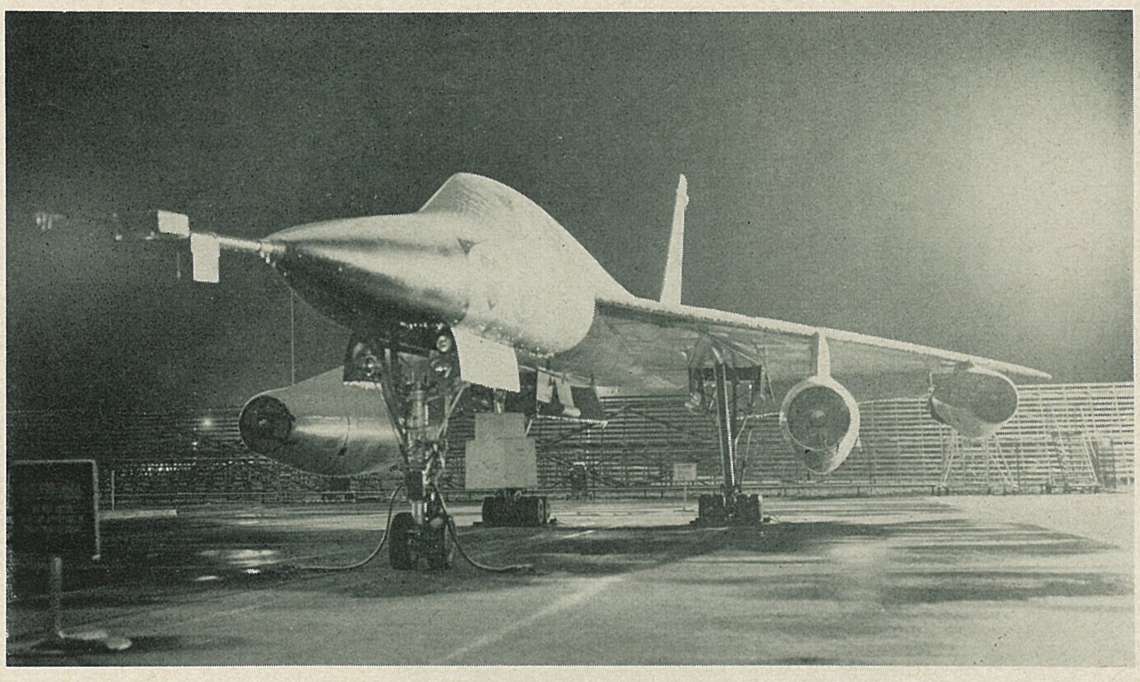
According to FW contracts department, special mobile training units which make up 19 of the approximate major areas of the aircraft are also being made at the FW plant with Zimmerman responsible.

Convair started working with mobile training units last April, and the first unit to be used is scheduled to go out sometime next month. This equipment is used to train support and maintenance people.

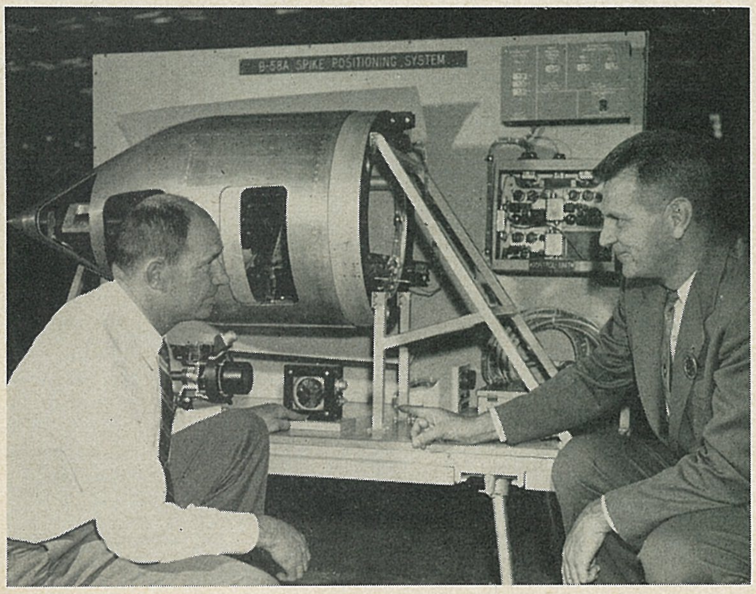
The 19 areas covered in the training program include the hydraulic and landing gear system, the airplane fuel system, the flight control and autopilot system, the pilot's ejection seat and canopies systems and the AC electrical power system.

Also, the DC electrical power system, the spike positioning system, the primary navigation system, the civil navigation system and the IFF and beacon system.

Other systems included are the command long range emergency radios and interphone system, fire control, passive defense system, air conditioning and pressurization system, J-79 engine fuel control system, TFE cover assemblies, power distribution.



LONELY—Looking lonely and cold, B-58 stands outside Convair FW plant with covering of snow. Just two days before, temperature had been 87 degrees! Last month's snowfall was first of season for Fort Worth. It was gone in a day.



TRAINING UNIT — Here O. Story, left, Fort Worth general foreman for development manufacturing, and C. H. Zimmerman, assistant project engineer, go over B-58's spike positioning system, one of Convair FW's recently completed mobile training units for the AF.

Tents to Shield Outdoor Crews

"Portable garages" will soon shelter Convair FW and Air Force people working on the tail and after-fuselage sections of the B-58 Hustler.

All-purpose rubberized nylon tents are being "sewed up" at Convair SD's Plant 2, especially designed to protect personnel from both "hot" and "cold." Whether it be strong Alaskan winds and 40-below temperatures or sand, wind, sun and torrid climate—such as the 135-degrees sometimes registered over pavement area at Convair FW.

First finished tent was sent to Fort Worth for a "fitting" last month. It, in turn, will be shipped shortly to Eglin Air Force Base in Florida, where it will be used by crews working on a B-58 undergoing special tests.

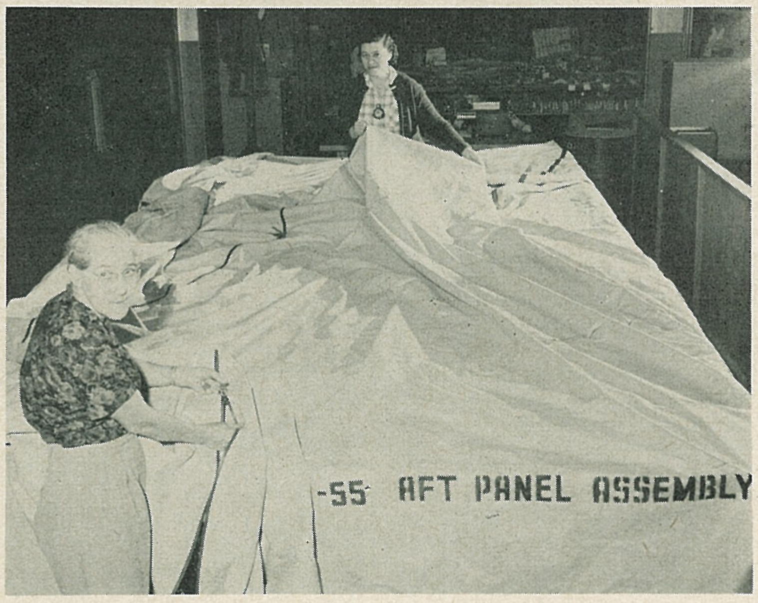
Dept. 280 had the second ready for delivery last week. Initial production order calls for ten.

Roughly the size of a one-and-a-half car garage, the tent is mounted on a platform of steel tubing. A stairwell provides access to the main working level which is slightly lower than the B-58 after-fuselage.

Heat or air-conditioning is provided by electric or engine-driven units.

The entire tail turret package can be swung open inside the tent. In addition, a separate (unattached) stand is provided which will enable personnel to reach the radome area from the floorwork level.

The tent is zipped into shape with 44 rubberized nylon zippers, C. T. Boyle, SD Dept. 280 foreman, said. It is designed to withstand winds up to 60 mph.



COLLAPSIBLE—Mary Nelson (foreground) and Susan Craiger (both SD Dept. 280), inspect tent to be used by crews working on tail section of B-58 Hustler, shortly before shipment to Convair FW.



CONFERENCE—Among reliability and quality control men attending General Dynamics Reliability Panel hosted by Convair San Diego Division recently were front row (left to right): R. Jackson and R. Jacque of Stromberg-Carlson; D. R. Archibald, Astronautics; A. C. McMaster, Pomona; J. Y. McClure, Fort Worth; Ray Golemb, Stromberg-Carlson; Dr. A. M. Small, San Diego; A. Dohna, Electric Boat; A. B. Oxley, Canadair; J. L. Coburn, Fort Worth. Standing (left to right) are R. K. Hood, Astronautics; T. A. Vogel, Pomona; John Murphy, Fort Worth; Sherman Weiner, Stromberg-Carlson; R. H. Gilliland, San Diego; H. L. McKeown, Canadair.

Field Office Formed At Huntsville, Ala.

Harry T. Dillon, project staff engineer at Convair Pomona, has been named manager of a new Convair field office to be opened April 1 at Huntsville, Ala., T. G. Lanphier Jr., vice president and assistant to the president, announced this week.

Dillon has been in charge of operational support aspects of Convair's Tartar guided missile program for the U.S. Navy at Pomona since 1953.

A native of Hudson, Mich., Dillon was graduated from Kearny High School at San Diego in 1944 and received a B.S. degree from San Diego State College in 1951. He joined Convair Pomona as an electronics engineer in 1952.

Fort Worth's McClure to Chairman Dynamics Divisional Reliability Panel

Ways to achieve more complete interchange of reliability services and information among all General Dynamics Corporation divisions were reviewed and kicked off Feb. 27 at the second meeting of the General Dynamics Reliability Panel hosted by Convair San Diego.

J. Y. McClure, Convair Fort Worth manager of quality control, was elected new panel chairman. He succeeds J. J. Crowley who resigned recently from his General Dynamics post in Washington. V. Dolson, acting reliability manager at Convair Fort Worth, continues as deputy chairman.

Attending the panel meetings in San Diego were representatives of all product manufacturing divisions of General Dynamics except Liquid Carbonic.

Among other actions taken, panel members approved a charter and bylaws under which the panel will operate in the future, McClure said. Dr. A. M. Small of Convair SD headed the charter and bylaws committee.

In the words of the charter, "the increasing necessity for reliability of products developed and manufactured for military and civilian use requires that broad corporate resources be utilized" to the utmost.

The charter further states that the panel operates to serve as a focal point for the corporation's handling of reliability matters, to increase breadth and depth of reliability knowledge and practice through information exchange between divisions, and to promote effective, organized approaches to reliability handling.

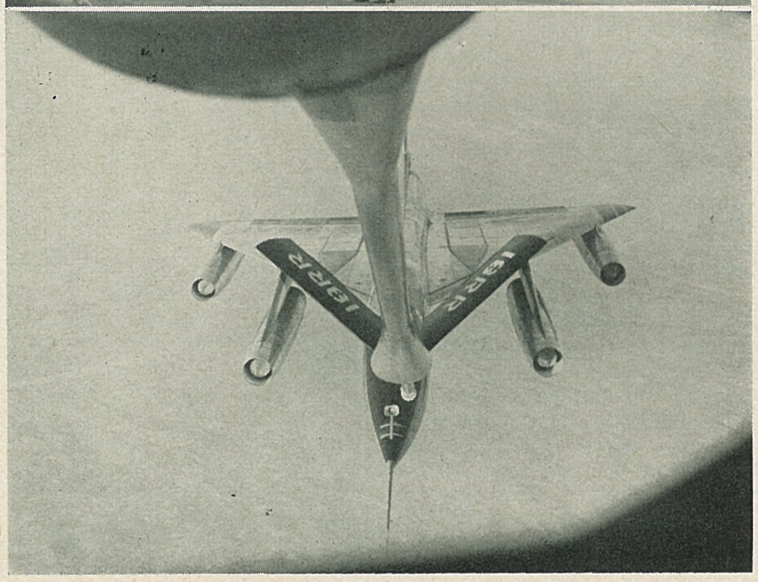
Objectives of the reliability effort are described as "increased product reliability, shortened product cycle time, and lowered cost from product inception to customer use phaseout."

The panel is made up of representatives from each General Dynamics division. It reports to L. B. Richardson, General Dynamics senior vice president-engineering.

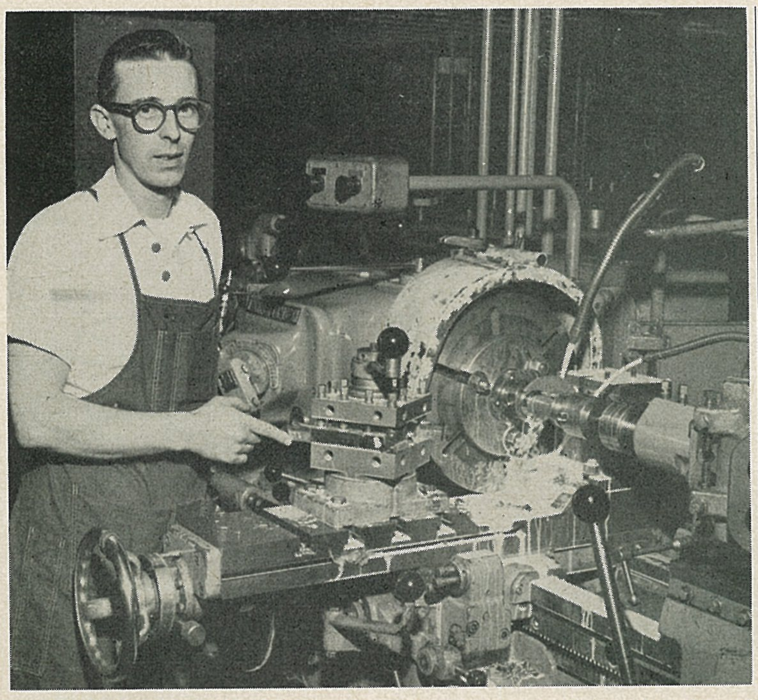
Among a number of presentations made before the panel in February was a Convair Fort Worth study in progress to develop a General Dynamics "resources manual." This will catalog unusual capabilities and facilities which are available at various divisions.

McClure announced that next meeting of the panel will be in about four months with Stromberg-Carlson division as host.





REFINEMENTS—Mid-air refueling techniques of B-58 are being refined both in air and on ground. In top photo is ground test setup at Fort Worth with KC-135 tanker parked on ramp about 10 feet higher than B-58's apron. In air shot, Photographer Aaron Murray's picture shows how refueling looks from tanker's boom operator post.



AT HOME IN U. S.—Sergejs (George to you) Unichovskis of Pomona, once a "displaced person," is now a successful lathe operator. He points to tool which brought him $110 Suggestion Award.

Escape to U. S.

Fugitive From Latvia Finds Peace, Freedom After Years of Struggle

Life is still not perfect for Convair Pomona's Sergejs Unichovskis (Dept. 51), but it is tremendously better than it was some 15 years ago.

His mother is still behind the Iron Curtain, his brother-in-law is stranded in Germany, a brother who disappeared during the Russian occupation of his native Latvia during 1940 has never been heard from since, and the U. S. is still a country of strange speech and customs.

But life is better than it has been for a long, long time. Sergejs—(Latvian for George)—now owns a home, is married, has a good car, and his mother and father-in-law are safe in this country. He and his wife are now U. S. citizens.

Latvia, a small country bordering on the Baltic Sea incorporated into the USSR in 1940, has enjoyed freedom from foreign domination some 20 of the past 800 years. Sergejs was fortunate enough to be born during this period of freedom. He was working as a photographer when the Nazis occupied the country in 1941.

Shortly thereafter he was conscripted as a civilian worker by the German Army and became a truck driver. For the next two years he worked behind the German lines as they advanced into Russia.

He recalls being sent ahead of German ammunition trucks to explode any land mines that might have been planted in the roads, living in his truck cab for days on starvation rations —"rations for three days made one good meal"—being ambushed, subjected to air attacks and attacked by guerillas.

Following the battle of Stalingrad, Sergejs escaped and made his way back to his native city of Riga—only to be arrested 20 days later by the Germans. He was thrown into a concentration camp, where he remained for almost four months.

Upon his release, he was again put to work and several months later was taken into Germany. He worked there for the Germans until Feb., 1945, when he deserted and crossed over to the American lines.

For the next four-and-a-half years he worked, usually as a guard, driver or photographer, for the American Forces or the military government.

During 1949 he applied for immigration to the United States, was accepted, and arrived in New Orleans. He was immediately employed as an agricultural worker, harvesting crops and picking fruit. A few months later his fiancee, whom he had met in 1945 in a displaced persons camp, arrived in the U. S., and they were married in Yuma in April, 1950.

But Sergejs' troubles were not over. Two weeks later he was involved in an automobile accident in Pomona which almost cost him his life. Six months—and two operations on his chest—later, he was well enough to go back to work, but was deeply in debt.

He went to work at Fairbanks-Morse in Pomona, became a turret lathe operator, and remained with the company for five years. He worked briefly for Northrop, and in Jan., 1956, came to work at Convair Pomona.

Since joining Convair he has had two Employee Suggestions approved and installed.

Sergejs has long since paid off the debts he incurred because of his accident. Now, whenever he has extra money, he sends necessities to his mother who is still in Latvia. But this is expensive, because the duties and transportation fees almost equal the value of the goods he sends.

Pomona to Conduct Air Traffic Study

Convair Pomona has been awarded a $140,114 contract to conduct an air traffic flow study of three of the nation's busiest airport areas.

Convair will study air traffic flow and air traffic delays at Oakland and San Francisco airports, Hamilton Air Force Base and Moffett Naval Air Station.

The San Francisco Bay area survey is to be completed by June 30. The contract was awarded by the Federal Aviation Agency.

Fitzpatrick Chief Pilot at Holloman

John M. Fitzpatrick, senior test pilot, has been named chief pilot at Holloman AFB for Convair SD, M. C. Terry, facility manager, announced.

In his new assignment Fitzpatrick will direct the flight operations of the armament development program for the F-106.

Fitzpatrick had served in the Air Force for 11 years before joining Convair SD in 1953. An engineering test pilot, he had been assigned to Edwards AFB where he assisted in the performance development of F-102s and F-106s.

'The Soviet Engineer' Topic of SAE Talk

The San Diego section of the Society of Automotive Engineers will hear a talk April 1, 6:30 p.m., on "The Soviet Engineer" at San Diego Hotel.

Secor D. Browne, a mechanical engineer who played an important role in the recent exchange of technical and scientific information between Russian and American libraries and universities, will address the group.

The May 16 meeting of the local SAE chapter will be a dinner dance at San Diego Country Club starting 6 p.m. with cocktail hour.



COMPETITION?—Maybe, but on a small scale. Larry Widmer, 10, son of R. H. Widmer, Convair Fort Worth chief engineer, shows off his model plane work.

Convair Son's Aircraft Plant Produces a Fleet of Models

Ten-year-old Larry Widmer is adding competition to the aircraft industry in Fort Worth these days—but on a small scale.

Larry, 10, son of Convair Fort Worth's chief engineer, R. H. Widmer, operates his own aircraft manufacturing "plant."

"Larry's worked on model planes for people all over town," said Mrs. Widmer. "He recently finished patching up a model B-32 Dominator for Amon Carter Jr."

Having been interested in model airplane building since nursery school days, he taught himself how to put the models together from kits, like many another Convair son.

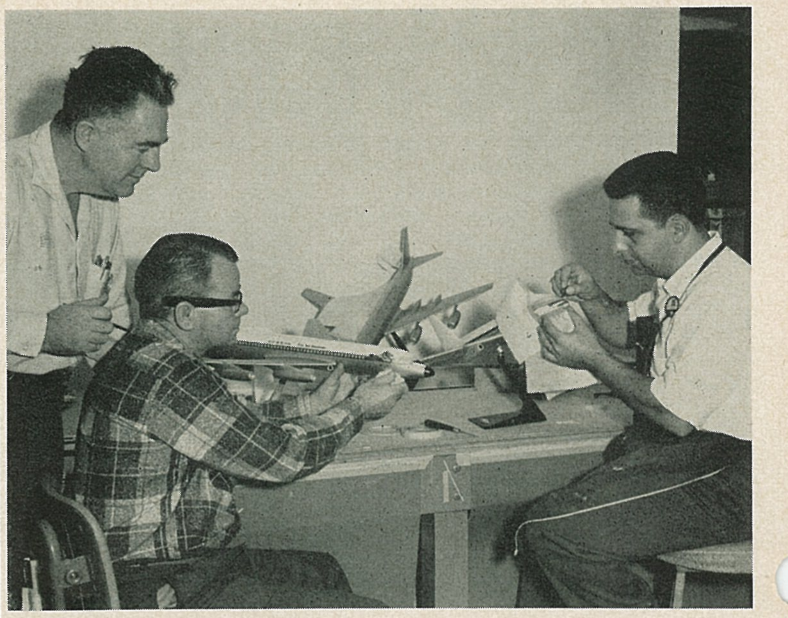
The first plane he built was the recently memorialized B-36, although he's now put together everything Convair has ever built since the PBY Catalina.

His room is filled with models of F-100s, F-102s, B-58s, F-104s and even Voodoos. Larry said it took him the longest to build the F-102.

Not only in the aircraft-making business, he is also interested in space and has several missiles in his collection. Just recently he sold FW Division Manager Frank W. Davis a new missile for his office and received a whole dollar for it, too!

The August C. Esenweins are probably Larry's biggest customers. Jarvis, one of the Esenwein daughters, took a station wagon load out to San Diego when she drove out to join her parents several days ago.

Young Widmer says he hopes to follow in his father's footsteps in engineering.



DECORATORS—Karl Busch, SD engineering illustrator, watches Wallace Butterfield and Gerald Blumenthal (Dept. 15-6) put finishing touches on models of Convair 880 marked with insignia of different airlines.

Airlines' Intricate Markings Reproduced on Sales Models

A small group of ingenious men at Convair San Diego ply their artistic brushes to faithfully produce airline markings in miniature on models of Convair's newest planes.

Realistically marking 27-in. models of Convair jet transports, the 880 and 600, which are used in sales presentations to commercial airlines all over the world, are experts of the training devices group of service publications' illustrations section.

Located in an "off-bounds" area at the north end of Bldg. 4's second floor are a handful of engineering illustrators meticulously copying the intricate markings which identify all of the world's airlines.

"Every one of the men in the group has a wide artistic background or extensive experience in model and training devices work," said R. W. Seehorn, assistant supervisor in charge of the group.

Karl Busch, engineering illustrator directly responsible for the work, said that present markings of the airlines must be adapted to fit the jet transport models. Drawings are made from sketches, postcards, or advertisements. "Many times it is difficult to find a reproduction of the markings of foreign lines," Busch said. "Then, a great deal of time is spent by our illustrators in research to be sure that we have the most current and up-to-date markings before we begin reproduction."

(One of the most colorful and intricate is a model in the works bearing the dragon insignia of the National Chinese Civil Air Transport.)

The insignia, lettering, and exterior plane configuration such as windows, etc., are reproduced on decals by the silk screen process, then applied to the plane after the striping is done. The planes are masked by hand and striped by air brush.

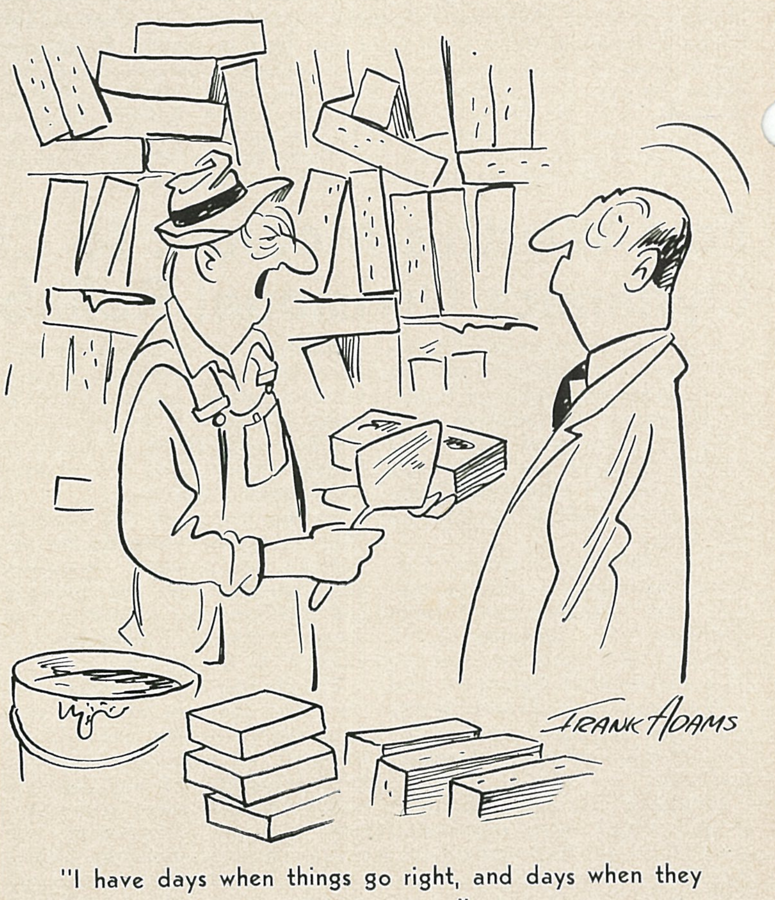
In addition to marking models, the training devices group constructs the 880 and 600 training aids used by customer service and production flight training.

According to P. H. Bray of Convair's commercial sales, the 1/57th scale cast plastic jet transport models have gone out to airlines in all parts of the world since last August. The models, themselves, are furnished by a Los Angeles commercial firm.

The model shop in SD experimental department lends a hand in the striping whenever needed and also manufactures the bases for the 17-in. models. The shop is responsible for the striping of the large 5 to 6-ft. Convair plane models used for exhibition purposes.



SAS 880 — Showing how the real thing will actually look, model bears airline's markings.



"I have days when things go right, and days when they go wrong . . ."

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.

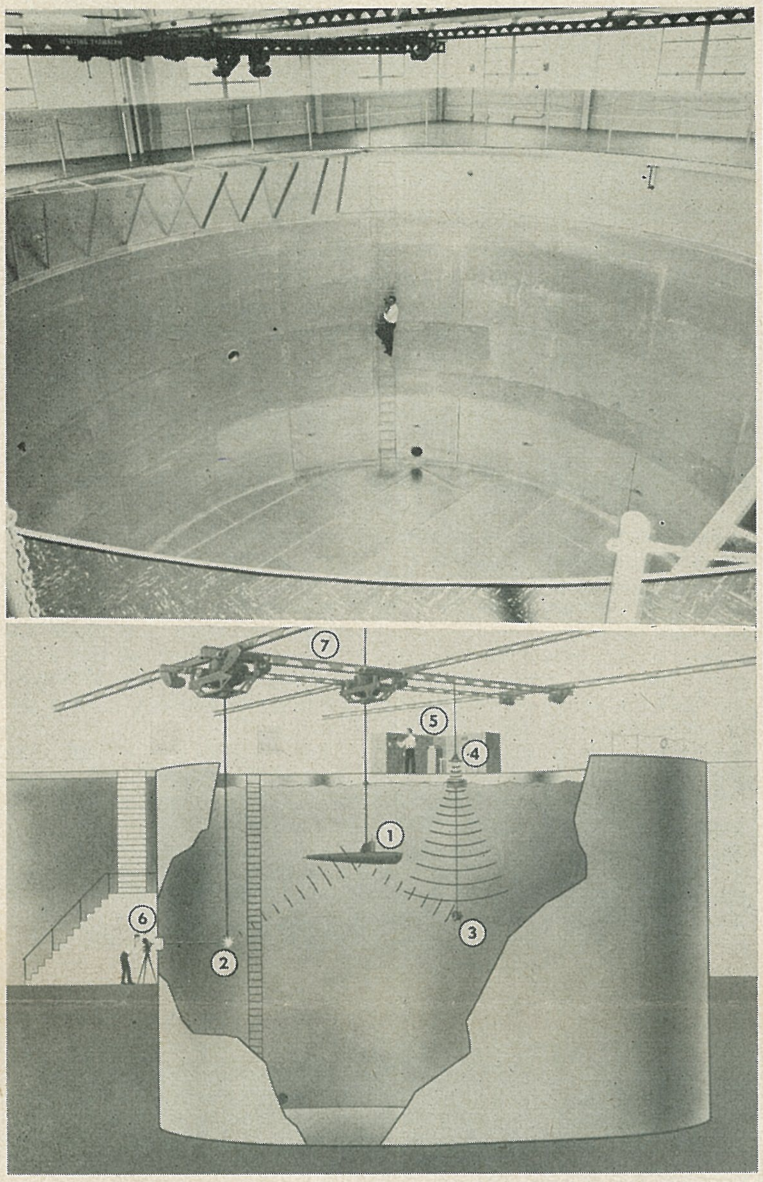
Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.



TEST FACILITY—Nation's largest indoor underwater acoustic test facility went into operation last month for Stromberg-Carlson. It is 48 feet in diameter and 30 feet deep. Sketch shows (1) model submarine serving as target; (2) underwater spark for echo ranging; (3) hydrophone receiving echo from sub; (4) loudspeaker for testing transmission of sound from air above; (5) control console; (6) camera; (7) overhead tram to position devices.

Skipjack Proves Itself World's Fastest Sub

GROTON—Last week Skipjack, the Navy's newest submarine, returned to her fitting-out pier at Electric Boat Division from her initial builder's sea trials. She made the highest speed that has ever been made by any submarine.

Skipjack is the first of the Navy's radical new class of nuclear-powered attack submarines. She has a streamlined advance hull form with a single propeller and improved ship controls. The nuclear reactor is of advanced design with longer life and higher power.

Skipjack's commanding officer, Cdr. W. W. Behrens Jr., his officers and crew put the ship through two days of intensive maneuvering. She performed superbly for them and the technical representatives assisting with the trials. These representatives, headed by Vice Adm. H. G. Rickover, included personnel from the Bureau of Ships, David Taylor Model Basin, Westinghouse, Electric Boat Division, Supervisor of Shipbuilding, USN, Commander Submarine Force, U. S. Atlantic Fleet, and Atomic Energy Commission.

On his return to Groton, Vice Admiral Rickover said he was very pleased with the trials and particularly commended the officers and crew of Skipjack for their high state of training.

This is the world's fastest submarine.

Taylor Transferred To Rochester Post

ROCHESTER—Henry M. Taylor has been appointed manager of military marketing for Stromberg-Carlson's electronics division. He was formerly marketing manager for Stromberg-Carlson San Diego and prior to that was with American Machine & Foundry Co. and Raytheon.

Stromberg-Carlson Gets Army Contract For Mobile Units

WASHINGTON — The Army last month reported award of a $12.6 million contract to Stromberg-Carlson which will increase ground-air mobility for combat communications facilities.

High echelon field headquarters will be provided with standard aluminum shelters, completely equipped for rapid installation of communication and electronic equipment, all designed for easy air or ground transport. The communication system was developed by the U.S. Army Signal Corps to provide a mobile central unit for communication networks. The contract will be executed by Stromberg - Carlson's electronics division. The shelters themselves will be sub-contracted.

It's a Close Call For Howard Golem

Howard Golem, Convair's director of procurement, must have had a shock when he read a headline in a local newspaper:

"Golem To Be Shot Behind Iron Curtain."

He was considerably relieved to read the amusement page story and learn that "Golem" was a silent motion picture, called a medieval classic, which will be refilmed.

Medical Academy Elects Dr. Leverett

Dr. J. K. Leverett of Convair Fort Worth last week was elected to membership in the American Academy of Occupational Medicine.

Dr. Leverett, chief physician, was notified of his election by the academy's president, Dr. Leonard Goldwater.

The academy devotes its annual meetings largely to study of the latest advances in the handling of occupational medicines.

William Barnes, 64, Pomona Guard, Dies

Funeral service for William K. Barnes, 64, Convair Pomona guard, was conducted March 7 in Pomona. Barnes, who had been under the care of a doctor for a month, died March 4, the day he was to have received a Convair 15-year service pin.

Barnes was survived by his wife, Mrs. Grace Lee Barnes of Pomona, four daughters, two sisters and a brother. Interment was in Greenwood Cemetery in San Diego.

New Staff Members Join General Atomic

SAN DIEGO — Drs. David J. Peery and John C. Stewart are new research staff members of General Atomic Division, according to Dr. Edward C. Creutz, director of John Jay Hopkins Laboratory for Pure and Applied Science.

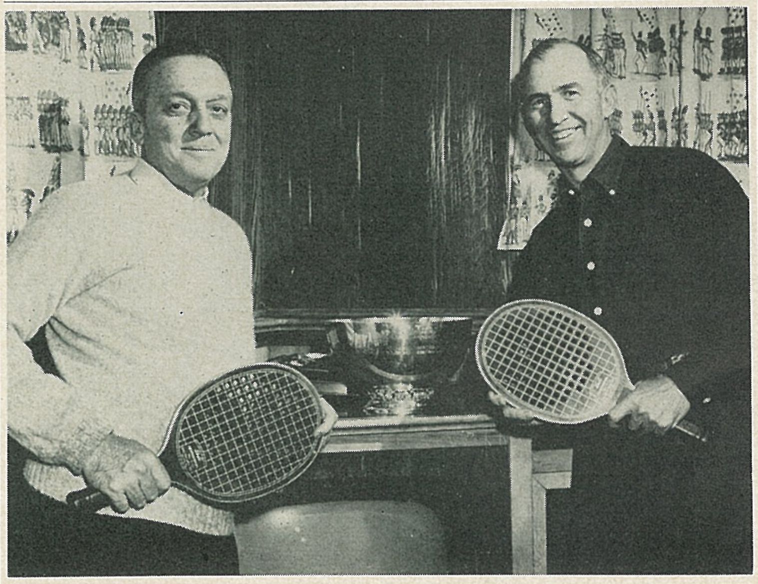
Dr. Peery is a former head of the aeronautical engineering department at Pennsylvania State. Dr. Stewart earned his doctorate in astronomy and physics at California Institute of Technology and is an expert in atomic reactor theory.

MICRO RECORDER BUILT FOR NAVY

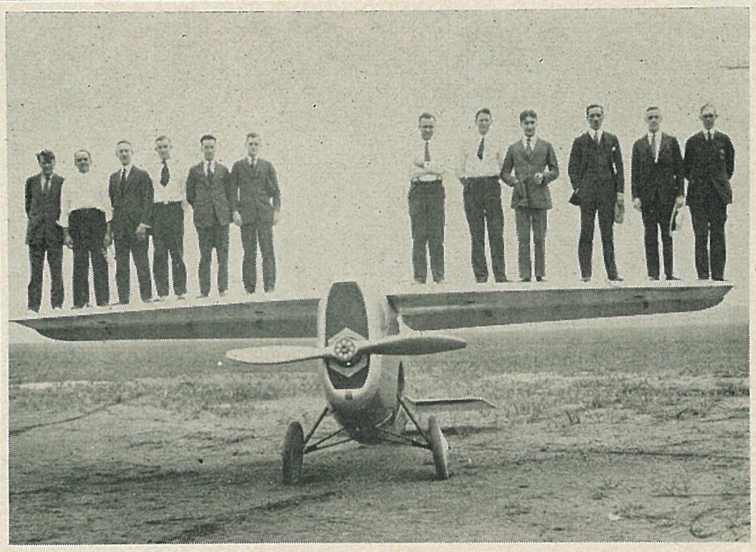
SAN DIEGO — Stromberg-Carlson has installed an SC 4010 high speed microfilm recorder at the Naval Proving Ground, Dahlgren, Va. The system is capable of recording up to 15,000 characters or 10,000 graph plotting points per second.

WELDING ENGINEER

GROTON — Ernest H. Franks has been named operations department welding engineer at Electric Boat Division, responsible for providing technical guidance, direction and assistance to all departments concerned with production welding in operations.



CHAMPIONS—Frank Pace Jr., right, president of General Dynamics Corporation, and his partner, Clifford Sutter, advertising agency executive, after they won American Platform Tennis Doubles championship last month. Sutter is former U.S. intercollegiate tennis champion.—Courtesy Macy Westchester Newspapers.



FIRST RETRACTABLE—When Consolidated was formed, Dayton-Wright Airplane Co. designs were part of early assets. Here is Dayton-Wright racing plane of 1920, first U.S. aircraft with retractable wheels. Men are unidentified except for last three at right, Harold E. Talbott, president; G. M. Williams, general manager; Charles F. Kettering, vice president, of Dayton-Wright.

Consolidated's Founder An Army Aviator in '17

(Previous installments in this history of Convair have sketched the development of the Gallaudet Aircraft Co. up to the point where Reuben Fleet entered the picture, and touched briefly on Fleet's youth.)

Reuben H. Fleet, founding father of Consolidated, was among the first to be chosen for aviation training in a new Signal Corps Aviation Section program in 1917. He reported for duty at the Army's Rockwell Field aviation school in San Diego March 29. Eight days later the country was at war with Germany.

After winning his wings, Fleet spent most of the war period in Washington in direction of aviation training. In the spring of 1918 he received new duty when the Post Office Department inaugurated the first regular air mail service between Washington and New York City. The Signal Corps supplied aircraft and pilots and Fleet was named officer in charge by Col. H. H. "Hap" Arnold, assistant Air Corps chief.

After civilian flyers took over the mail service in July Fleet sailed for England aboard the troopship Olympic. Arnold, who was on board as troop commander, was coming down with pneumonia. He charged Fleet with correcting the unmilitary appearance of the aviation officers and chaplains. Recalling the voyage long afterwards, Arnold wrote:

"The next thing I remember clearly was being carried to an ambulance on the Southampton dock . . . Not a sound was heard until a faint murmur reached us from ahead. As we drew closer the sound became more distinct. It was Maj. Reuben Fleet, marching his chaplains and Air Corps officers from Southampton to Winchester, at attention, in the rain, in the dark, at 11 o'clock at night. 'One, two, three, four. Damn you, chaplains, keep in step. One, two, three, four . . .' He was making soldiers of them."

After graduating from Britain's school for flying instructors at Gosport, Fleet returned to the U. S. and was stationed at Dayton as business manager of McCook Field and contract officer for the Air Service. At that time McCook was the home of the Engineering Division which kept post-war aviation progress alive with a program of original design, prototype construction and rigorous testing. Fleet remained at this crossroads of military aviation from January, 1919, until the fall of 1922—negotiating contracts with manufacturers, purchasing material from suppliers, rubbing elbows with Air Service lawyers, engineers, and flyers.

When he decided to quit the service and make his fortune in private industry, Fleet turned down executive jobs with two well-established companies (Boeing and Curtiss) to become vice president and general manager of the Gallaudet Aircraft Corp. at East Greenwich.

"I remember clearly why I chose Gallaudet," he has said. "Its financial backers embraced the wealth of the country—men like Harry Payne Whitney, who was worth $200 million."

Gordon W. Graff, Manager of Convair Omaha Office, Dies

Gordon W. Graff, 44, manager of Convair's Omaha office since October 1954, died in the Nebraska city March 7. He had been in poor health for some time.

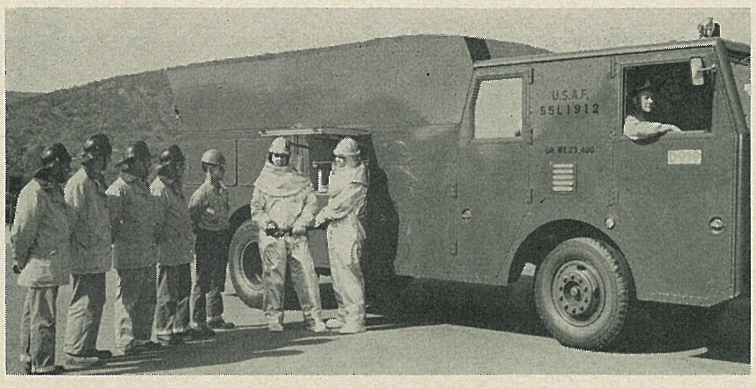
A native of Springville, N. Y., he received his B.S. in aeronautical engineering from the Aeronautical University, Chicago, Ill., in 1938. Before joining Convair's Stinson Division in 1939, he worked for Curtiss Aeroplane and Bell Aircraft in Buffalo, N. Y. He transferred from Nashville to the Fort Worth Division in June, 1944, as assistant group engineer, later serving as chief liaison engineer, B-36 assistant project engineer, and project engineer in charge of B-36 production and modernization.



Gordon Graff

COMMANDER FETED BY LANCASTER C. OF C.

Brig. Gen. John W. Carpenter III, new commander of Edwards AFB, home of the Convair Edwards facility, was honored March 11 by Lancaster Chamber of Commerce at its regular directors' luncheon meeting held at Antelope Valley Inn.



DEMONSTRATIONS—Astro's Sycamore Canyon test base has one trained auxiliary fire fighter for every 10 employees, not including fire department members. Above, regular firemen, in asbestos equipment, give demonstration. There are 58 trained auxiliaries.

Auxiliary Crew Supplements Sycamore Base Fire Fighters

It would be hard to accuse the Convair Astronautics test base in Sycamore Canyon of being "short" of qualified fire fighters. One out of every 10 employees there is trained in the art.

This does not include members of the fire department, a remarkable ratio, even for a test base. It is made possible through an extensive training program, called auxiliary fire fighting, conducted by industrial security forces.

Astro's Sycamore Canyon facility is located on a square mile of land in a very remote sector. Better than 95 per cent of the area is covered with brush and weeds that are dry and inflammable most of each year. Too, missile fuels in use there are highly combustible and rocket engine tests conducted in two stands generate extreme heat.

Astronautics has taken every precaution to eliminate fire danger. Buildings are fireproof. Each test stand contains three built-in fire extinguishing systems. Security patrols comb the area throughout the day and night, equipped to request by radio the dispatch of one or more of the four pieces of mobile fire fighting equipment available. And there are 35 full-time firemen working three shifts, seven days a week.

"But we must plan for the worst and hope for the best," said H. W. Gillespie, security chief at Sycamore. "This is why we have trained additional personnel to help out in emergencies."

In all, Sycamore has 58 trained auxiliary fire fighters. Eighteen attended the 10-hour training program during 1958. They and those trained earlier learned fire prevention, "first aid" to fires, what equipment is available, etc.

Careful planning has made it possible to have one or more auxiliaries available on each crew and in each area on regular shifts.

Each man is set to respond instantly to emergencies. They can help string hose, move equipment and even handle nozzles, if needed. As a distinguishing mark, each wears a black helmet when assisting in fires.

Despite this "striking force," Astro is responsible only for those fires which occur in areas adjacent to buildings, test stands, etc. A mutual assistance pact with the Astro plant and Navy installations at Miramar NAS and Camp Elliott would bring any or all of these groups to assist in extreme emergencies. Camp Elliott has both the equipment and manpower to combat larger brush fires.

Log Book Entries

Promotions

ASTRONAUTICS

Promotions and transfers to or within supervision effective March 2:

Dept. 192, Tabulating: To tabulating asst. supervisor, C. A. Clements.

Dept. 193-3, Industrial Accounting: To timekeeping asst. supervisor, E. Leep.

Dept. 220-4, Manufacturing Control: To manufacturing control asst. foreman, J. E. Maclean.

Dept. 250-7, Plant Engineering: To asst. foreman Gr. V, V. P. Arnold.

Dept. 280-3, Inspection: To inspection asst. supervisor Gr. V, F. E. Hinton.

Dept. 327, Support Documentation: To parts documentation supervisor, F. L. Furry, N. S. Simmons.

Dept. 341, Support Supply: To GFE asst. supervisor, J. L. Bigley, H. W. Thompson.

Dept. 343, Support Manufacturing Control: To support tooling asst. supervisor, R. T. Mulroy.

Dept. 344-3, Support Operations: To general foreman, W. J. Cushman.

Dept. 350, Support Base Activation: To activation support technical supervisor, W. J. Hammond.

Dept. 460, Tool Service Administration: To asst. foreman Gr. III, T. G. Graves, D. W. Quinlan.

Dept. 731, Machine Shop: To asst. foreman Gr. V, G. A. Vance.

Dept. 773, Missile Checkout and Acceptance Department: To asst. foreman Gr. III, C. W. Neal.

Dept. 775, Trainer Assembly: To asst. foreman Gr. V, D. L. Schmitz.

AFMTC

Dept. 571-3, Convair Operations: To asst. foreman Gr. V, H. O. Johnson.

WARREN AFB

Dept. 351, Convair Operations: To inspection asst. supervisor Gr. V, J. D. Hackney. To asst. foreman Gr. V, C. E. Jones, J. W. Richardson, C. A. Sheppard, E. A. Thompson.

Service Emblems

ASTRONAUTICS

Service emblems due during the period March 16 through March 31:

Twenty-year: Dept. 280-4, J. A. Mello.

Fifteen-year: Dept. 214-1, W. C. Hunt; Dept. 772, Beatrice M. Blomke.

Ten-year: Dept. 220, J. F. Funaro; Gladys D. Raynaud.

SYCAMORE

Fifteen-year: Dept. 573-6, E. H. Andrews.

Births

ASTRONAUTICS

BEATTY—Daughter, Joan, 6 lbs., 1 oz., born Feb. 9 to Mr. and Mrs. J. Beatty, Dept. 500.

MENDOZA—Daughter, Ramona, 7 lbs., 15 oz., born March 9 to Mr. and Mrs. Ray Mendoza, Dept. 130-5.

Deaths

ASTRONAUTICS

BARTLESON — Harold, Dept. 571-1. Killed March 1 in auto accident. Survived by wife, Jean; one daughter, Jean.

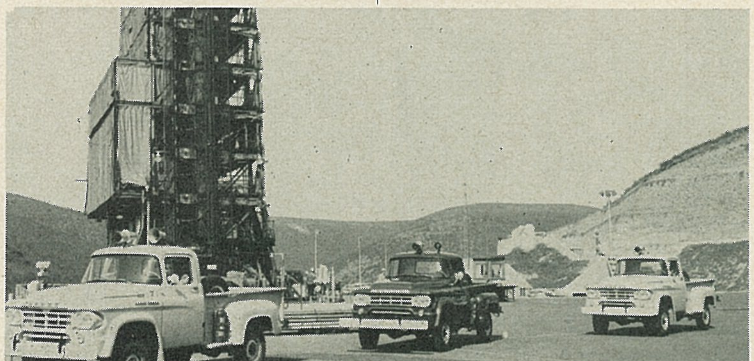
Trucks on Duty At Test Base

A "fleet" of jeep trucks, long a familiar sight to employees and visitors at Astronautics' Sycamore Canyon test base, has given way to a new fleet of "Power Wagons."

Three Dodge half-ton pick-up trucks have taken over as security vehicles. Two are assigned to security patrol, one is being outfitted as a fire truck.

Each is built to travel over the rugged, unpaved roads and trails along and inside the more than three-and-one-half miles of fences that surround the facility.

Two-way radios keep the vehicles in constant touch with security control headquarters. Each carries a complement of crash tools, fire fighting gear and the traditional "snake catchers" utilized by security to kill reptiles invading populated areas. And each is equipped with four-wheel drive. The fire vehicle also sports a power winch.



REPLACEMENTS—New heavy-duty pick-up trucks have replaced jeep trucks long used at Astro's Sycamore Canyon test base. All are radio-equipped, four-wheel drive, capable of travel over rugged back country roads. Center vehicle is fire truck, other two are used for security patrol. They are shown starting rounds from S-2.

Skiers to Race At Big Bear

Astro Skiers (the snow breed) have a real action-packed weekend in store for them Saturday (March 21) and Sunday at Snow Summit, Big Bear Lake.

Featured will be the first Astro race competition. Three races are to be run, one each for men, women and novices. Non-members may enter by payment of a $1 entrance fee.

Wawona Lodge has been reserved. Cost for food and lodging for the weekend is $12 per person. However, tomorrow (March 19) is the final date for making reservations. Ron Grant, ext. 835, is handling reservations. Lillian Poltere, ext. 1163, is ride coordinator.

Final plans for the outing will be ironed out at a March 19 meeting starting at 7:30 p.m. in the presentation room, Bldg. 2, at the Astro plant. Slides and movies of a Sun Valley excursion will be shown.

* * *

Astro's Skiers this month chalked up another feather in the cap which now includes feathers for some of the top ski runs in the western United States.

Sixteen San Diego skiers, including eight from Astro, recently returned from a Sun Valley, Idaho, vacation. They skied over 20 different runs.

Auto Crash Fatal To Test Engineer

H. J. Bartleson, Astronautics flight test engineer at AFMTC, Florida, was killed Feb. 28 in an automobile accident while traveling home from his second shift job.

Bartelson graduated from the University of Colorado in 1956 and joined Convair shortly thereafter. He transferred to the Astro operation at AFMTC later that year. He is survived by his wife, Jean, and a five-year-old daughter.

Two Astro Juniors Win Archery Shoot

One adult and two juniors representing Convair Astronautics CRA archers came through for honors during the March 8 combined handicap shoot with San Diego Division.

"Red" Bangsberg of the Group Two adult division came in second. Kenneth Bangsberg won the age 10-11 shoot, while Douglas Beary won the age 7-9 bracket. The latter are sons of Astro employees.

City Casaba Action In Home Stretch

Astronautics this week sent its City League basketball team into action in the annual San Diego post-season cage tournament.

The event, which concludes casaba action in the city each year, will run for several weeks. Astro's team placed second in a pre-season tournament involving many of the teams now taking part.

Fred Niece Rolls Triplicate Scores

Fred Niece, Astro kegler, this month qualified for an ABC "triplicate" patch by rolling a 193-193-193—579 series.



FIRST PRESENTATION—Initial Missileman-of-the-Month award presented by Astronautics Management Club last week went to late Dr. Hans R. Friedrich. His widow, Johanna, is shown receiving statue from Mortimer Rosenbaum, Astro's chief engineer. Crowd gave Mrs. Friedrich standing ovation.

Astro CRA Canvassing Demand For Two-Week Trip to Europe

Astronautics CRA this week announced tentative plans for setting up one of two proposed two-week vacation trips to Europe this summer.

Such a trip would be open to employees and their families, provided the employee is eligible for a vacation at trip time. A successful trip in 1958 drew 95 Convair participants.

Travel organizations have offered two package deals to CRA. One would be in July, the other in September. Total cost for the all-expense flying trip would be $635 per person or less. Group preference would dictate which trip is to be considered. As an alternate, travelers could travel with the group to Europe (for $450 or less, round-trip), then make their own arrangements on the continent.

Another possibility connected would be the ability to purchase foreign cars at a reduced rate over local delivery prices.

To get some idea of the demand for such a trip, an organizational meeting is planned for 5:15 p.m. March 23 in the Astro executive dining room. Wives or husbands of employees may attend.

Those unable to attend may contact CRA at ext. 1111, asking that details be supplied following the meeting.

Young to Take Over Astro Graphics Job

Marvin A. Young has been named supervisor of graphic reproduction at Convair Astronautics by C. T. Newton, manager of communication.

He succeeds H. G. Parker who has resigned.

Other appointments in the same office include Al Ridgeway as assistant supervisor-planning and William Jessup, assistant supervisor (acting) of reproduction, day shift. Donald E. Howe is the new assistant supervisor for reproduction — nights, reporting to Jessup.

SD and Astro Split 'Silver Bird' Honors

Winners were about evenly divided March 1 when Convair Astronautics Gun Club staged a "silver bird" shoot in conjunction with the San Diego Gun Club.

Astro shooters carried off the trap prizes, while San Diego took skeet and rifle honors. Mr. and Mrs. John Hartwell, whose son, John, is a Dept. 451 employee, won first and third in the trap event. Fourth went to George Anderson of Dept. 773.

PLAYERS FOR OUTSIDE TEAM SOUGHT

Experienced softball players interested in wearing Astro CRA colors in outside competition are being sought. Players are asked to contact Ray Mendoza of CRA, ext. 1111. Regular tryouts will be held as soon as sign ups warrant.

LOAFERS FINISH IN FIRST PLACE

Final tabulations of the recent San Diego Bowling Association championship tournament show that the Loafers, Astro team from the El Cajon Valley league, finished in first place in the "E" team event.

Test Data to Face Development Team For Astro Crown

A final game victory last week by Development brought some order to a topsy-turvy situation and sent Development into a three-game series against Test Data for the Astro plant basketball championship.

Two weeks ago Development, Launch Control and Propulsion Development were deadlocked for the Wednesday league lead. Development won a 31-24 game from Transportation while Launch Control downed Propulsion Development 52-40. Then Development won a close 37-30 game with Launch Control for a one-game margin.

Play-offs are set for 7:00 p.m. tonight (March 18) and Friday on Court 1, Muni Gym.

All-Day Horse Show Set for Astro Riders

Astronautics riders are planning a big show beginning at 8:30 a.m. April 5 at the CRA riding area near the Astro plant, Commissioner F. W. Augustine reports.

Events will include English, western and jumping competition for all ages. Credit will be given toward the San Diego County high point award for 1959.

There is no charge for the all-day show. Refreshments will be available.

Race Drivers Lay Plans for a Track

Race drivers at Astronautics meet at 7:30 p.m. March 24 in the executive dining room to discuss building of a race track.

All persons interested in quarter midget, half midget or Formula "K" racing are invited to attend. Jim Conklin, ext. 1111, will supply details.

Astro Bowler Wins Honors in 'E' Division

Frank Randazzo of Convair Astronautics wound up the recent San Diego Bowling Association tournament in first place in the "E" division singles.

CRA Sports & Recreation Convairiety

Shop Softball League Planned by Astro CRA

Astronautics this week announced plans to form its first shop softball league during an organizational meeting set for 5:15 p.m. Friday (March 20) in the Astro cafeteria.

All managers or representatives of departments or functions interested in taking part are urged to attend, according to Ray Mendoza of CRA.

Since this is the initial shop league, CRA has no idea how many teams will take part. However, arrangements can be made for as many as 16 or even 20 teams, if interest warrants. Play could be divided into two or more league sections, playing on different nights.

At present CRA is planning its own softball diamond as part of the development of the CRA recreation area adjacent to the Astro plant. Employees at Sycamore Canyon have volunteered to build the diamond as a work project for that department. Some work along this line has started. If it is completed by mid-April, action will center there following regular work shifts. If not, CRA will arrange to use other diamonds in the interim.

Astro Divers Catch Three Live Sharks

Three live horn sharks (the largest three feet long) were turned over to the Scripps Institute of Oceanography early this month with the compliments of Astro Divers.

Scripps is making a study of the horn shark and asked for help in obtaining live specimens. Astro's CRA skin diving group was the first to respond. One was landed March 1 by Joe Walker with an assist from Cliff Kickbush. Jimmy Hodges bagged the other two. The divers landed their prizes by swimming quietly up behind them, grabbing the tail and wrestling them to shore.

Walker also grabbed first in a lobster dive held that day off Sunset Cliffs.

Coiners Will Hold Their First Auction

First auction staged by the Astro Coineers comes off tonight (March 18) at 7:30 during a cafeteria meeting. All coin collectors are invited to participate. Door prizes and refreshments will be available.

The Coineers have just been admitted to the American Numismatic Association, largest organization of its type in the world. With the membership goes special privileges such as borrowing books on coins, etc.

Coming Events

ARCHERY — Election of officers, 7:30 p.m. tomorrow (March 19), plant cafeteria.

ASTRONAUTICS WIVES CLUB — Regular monthly meeting, 7 p.m. March 25, executive dining room, refreshments. Astronotes will entertain.

RIDING CLUB SHOW—April 5, 8:30 a.m. at CRA riding arena near Astro plant. Call ext. 1911, F. W. Augustine, for information.

SOFTBALL LEAGUE — Organization meeting, 5:15 p.m. March 20, plant cafeteria. Call Ray Mendoza, ext. 1111.

CRA Discount Tickets

ATLAS PINS—Replicas of Atlas ICBM suitable for lapel or tie.

DECALS — Astronautics window decals.

DISNEYLAND — Membership in Magic Kingdom Club allowing discount purchases at park.

MARINELAND — Discount tickets for adults, children.

MOVIES—Special Dana Lamb showing of "Conquest of the Mystic Mountains" 8 p.m. March 20, Hoover High School. Tickets $1 and 65 cents.

ROLLER SKATING — Skateland April 20, no charge.

SLEEPING BEAUTY—Magic Kingdom Club cards good for discounts at Beverly Hills showing.

SPACE PRIMER — An introduction to astronautics, 10 cents each.

Navy Diver to Speak For Astro Activity

Astro Divers will hear Emil Habecker, a Navy diver associated with Scripps Institute of Oceanography, describe underwater exploits when they gather at 7:30 p.m. March 24 at the executive dining room.

Habecker will also present a collection of slides and movies taken in underwater activities.

Astro Divers will also elect a new slate of officers for the coming year.

Lensmen Plan Outdoor Shoot

Astrolens, CRA camera group, has two interesting programs on tap before the end of March and another shortly after the first of April.

Sunday (March 22) cameramen will haul their gear to Mount Woodson, on the highway to Ramona, for an outdoor model shoot beginning at noon. Models will be Deanna Carlsen (Dept. 270-1), Shirley Kuenne (Dept. 532-0), and Katy Tanonis (Dept. 545-7).

March 23 at a regular meeting set for 7:30 p.m. in the executive dining room Astrolens will feature a program on photo journalism. Featured speakers will be H. S. Kierstead, Astro publicity photographer and former San Diego Union-Tribune photographer and Stan Griffin, chief photographer of the Union-Tribune. Bryan Weickersheimmer, **Convairiety's** Astro news editor, also will appear.

April 12 will find the Astrolens playing host for the first time to members of the San Diego Division Camera Club. An interesting program, plus model shoot is being planned, according to Ken Rinker, Astrolens commissioner.



WINSOME — Pretty Karol Gentry of Astro purchasing has been signed as model for joint Astrolens-SD Camera Club model shoot April 13. Ken Rinker, Astrolens commissioner, snapped this preview shot.



DEAD EYE—Opening ceremonies for first Astro plant keg tournament was gala affair. Larry Tuttle, Astrolens president, caught this picture of M. V. Wisdom, manager of industrial relations, rolling first ball. It was a strike! Al Schuss was emcee for affair.

Swing Shift Entries Lead

Two swing shift entries lead the way in the opening rounds of the first Astronautics CRA plant bowling championship over the first weekend of March.

Team 63 captained by Richard Williams turned in a total of 2,988 pins to win the men's handicap team event. Buck Walsh's Team 43 was second with 2,978 pins, while Ed Frankoski's Team 73 rolled a total of 2,951 pins.

In mixed team action Team 28 captained by J. Hynd was tops with a 2,921 total, followed by Team 65 (Nancy Tatum) with a 2,888 and Team 41 (M. Foulke) with a 2,884 total.

Over the past weekend (March 14-15) some 149 doubles combinations and 298 singles entries bowled.

Two summer bowling leagues are being formed presently at Convair Astronautics. They begin rolling during April.

A swing shift league starts summer activities. Lee Kite, Buck Walsh and Jack Wertz are organizers. Bunny at ext. 1111 will accept entries.

Lorraine Sweeny, ext. 151, is taking entries for a Sycamore Canyon league.

SD, Astro Golf Winners Listed

Twenty-four golfers, ranked in three flights, took top honors in a partner's best ball tourney, sponsored by the Convair Golf Club, which ended play March 1 at Rancho Santa Fe.

Over 200 linksmen from Convair San Diego and Astronautics participated.

In the first flight the top four winning twosomes in the order they placed were: Herb Walker (Dept. 190-0) and Ray Tonsager (Dept. 193-3), both Astro; M. W. Glithero (Dept. 292-3), Vance Walsh (Dept. 292-1), both SD; J. M. Sentovic (Dept. 322-7), Morrie Baxter (Dept. 211-2), both Astro; H. V. Purnell (Dept. 1-24) and J. R. Dempsey (Dept. 100), both Astro.

The top three twosomes in the second flight were from SD. They are: E. E. McKenzie (Dept. 600-2), J. D. Santone (Dept. 600-2); Jim Busby (Dept. 8-2), Robert Lea (Dept. 603-7); A. D. Driver (Dept. 160) and C. R. Lind (Dept. 188-7). Rounding out the flight from Astronautics were G. E. Bostwick (Air Force plant representative) and J. K. Davant (Dept. 180).

Twosomes from SD also took the top three places in the third flight. They included: L. J. Gregg (Dept. 197-4), Al Hammer (Dept. 197-4); F. K. Doris (Dept. 6), N. D. Long (Dept. 6); A. C. Taranto (Dept. 603-3) and J. M. Izzarelli (Dept. 271). In fourth place from Astro were G. C. Hubbard (Dept. 150) and H. Ferguson (Dept. 181).

Next Convair Golf Club activity will be a sweepstakes at Caliente this weekend (March 21-22).

Golf Lessons' Cost Chopped Drastically

A last-minute "signal change" to take advantage of bargain rates has been announced for a series of golf lessons to be offered to Astro women through CRA subsidy.

Five lessons are now available for only $1. They will be offered at 9 a.m. each Saturday beginning April 4 at the Colina Park course on 54th Street. Equipment will be available, if needed.

Employees may sign for wives and daughters by contacting CRA, ext. 1111.

Five Ties Noted in Golf Sweeps at Flying Hills

Ties were commonplace in the March 7-8 "best nine" sweepstakes event which drew 128 Astro par chasers in Flying Hills.

Jim Jones and Jack Ross deadlocked for first in the 0-14 handicap bracket with gross 76s. Bill Wray and Bill Barter tied for second with 78s. Low net found Bill Kenney and Whitey Kime tied with 80-12-68 marks, while Clyde Ford and John Sentovic deadlocked for second with 82-13-69s.

George Lange paced the 15-21 gross ranks with an 80, Mike Williams came in second with an 82 and Jud Kenney and George Burst tied for third with 84s. Low net fell to John Mowatt with an 84-19-65 card, second went to Lyle Jenkins with an 84-18-66, and third was won by Russ Gaughen with an 86-16-70.

Low gross in the 22 and up fell to George Michalson with a 90, followed by Earl Ford with a 90 and Joe Slanity with a 94. Low net was grabbed by R. Welch with a 98-33-65. Second and third went to Tom McCubbins with a 92-27-65 and Bob Scott with a 92-26-66.

* * *

Astro golfers will gather in the reception center (Bldg. 2) at the Astro plant April 1 at 7:30 p.m. for two features.

One will be an all-star golf movie featuring Billy Casper and Tommy Bolt. At the same meeting plans will be ironed out for the forthcoming twilight golf league to start shortly after daylight savings time comes to California.

New Memory Class in Doubt

Opening of several new memory courses at Convair Astronautics remained in doubt this week due to the limited response to date, reports Jean Bryan, CRA commissioner of women's activities.

Proposed courses would start late this month on Tuesday and Friday nights. There is also some thought being given to starting an afternoon session, also on Tuesdays, for second shift employees.

Initial classes drew 162. They are being taught by Don Robinson, local memory teacher. Robinson will also instruct future classes.

Those interested are asked to contact Elaine, ext. 1111. If sufficient interest is shown, plans will go ahead. If not, they will be tabled at this time.

FIFTEEN APPLYING FOR SCHOLARSHIP

Some 15 Astronautics sons and daughters have filed applications for the first annual Astronautics Management Club scholarship program, Owen Huff, committee chairman, reports.

Yesterday (March 17) was the deadline for entering. One boy and one girl will receive $500 scholarships each. Runners-up, a boy and a girl, will be presented $100 Savings Bonds.

Huff's committee is busy this week in preliminary judging. Survivors of the initial judging will report to the Astro plant April 4 to take a State College-conducted aptitude and vocational test. Finalists will appear before a panel of three outside judges around May 1. Scholarship presentations will be made at the June Management Club meeting.

Astro's Radio Club Will Hear Fithian

Jim Fithian, a member of Astro engineering's electronic engineering component test equipment group, will be a speaker at the Astro Radio Club meeting set for 7 p.m. tomorrow (March 19) at the executive dining room.

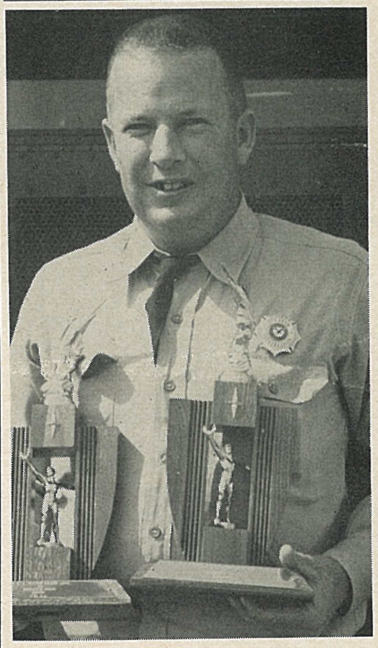
Fithian will discuss "Transistors" and their relationship to "ham" radio equipment.

Astro Drivers Shine During Time Trials

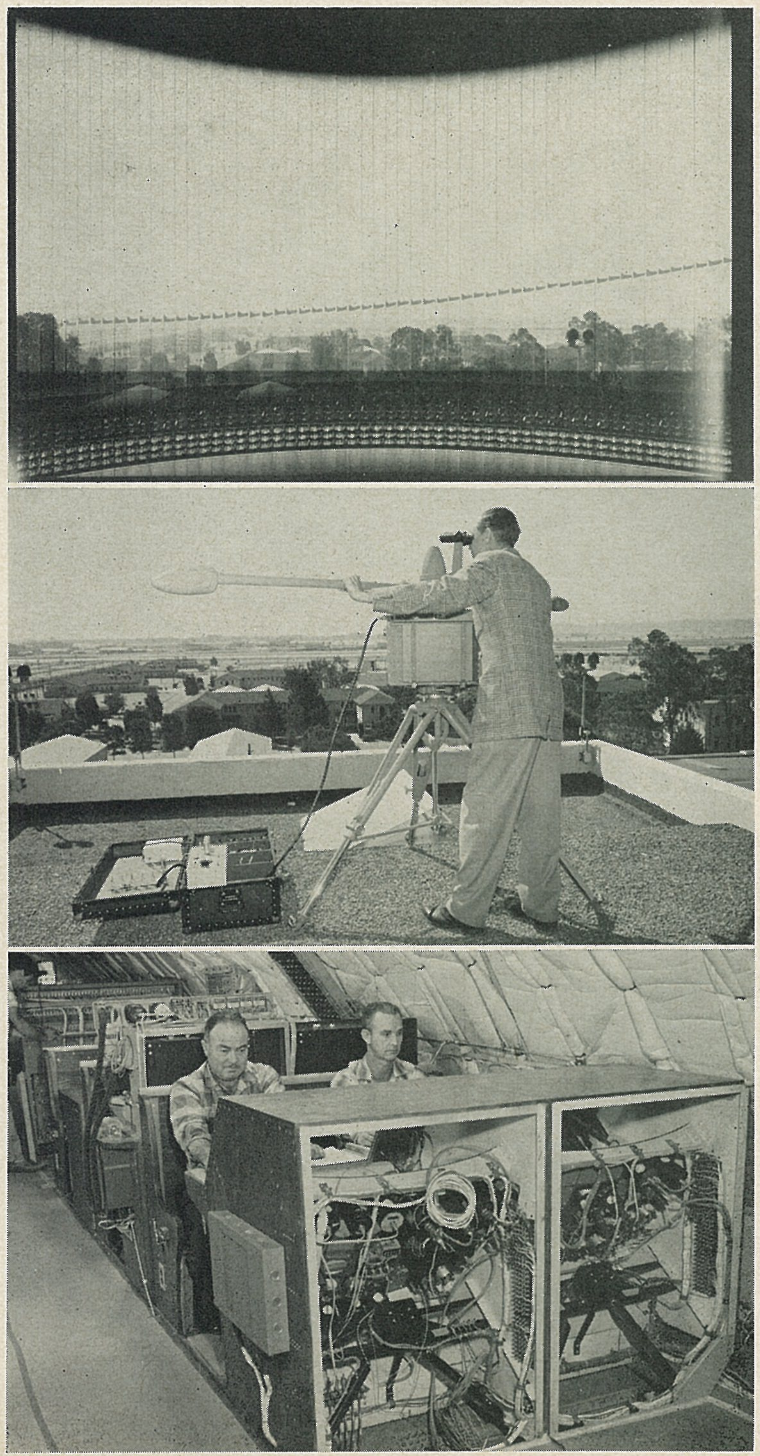
Astro Sports Car Club members turned in some commendable performances March 1 when they joined with the Convair SD Sports Car Club in a time trials event at Hourglass Field.

A total of 66 entries participated in the all-day event which featured practice runs in the morning and two timed laps over the two-mile course in the afternoon.

Astro winners included: Class H, Angelo Catani, first; Class F, William Lester, first, Dave Pyle, second, Jim Bell, third; Class E, S. "Judge" Penick, first, Jim Rudjord, second, Curtis Claybrook, fourth; Class C, George Wood, second; women's class, Diane Gray, second.



ABLE ANGLER — Richard Maler, fireman at Astro's Sycamore Canyon test base, displays pair of trophies he won for largest fish in annual Southwest Angler's Association during 1958. One was for 12-pound, 10-ounce bonito, other for 12-pound, 7-ounce barracuda.



WATCHING IT TICK—As part of data-gathering operation on performance of first Convair 880 during tests Jack Gavett (center), instrumentation photographer, takes pictures like top reproduction during takeoff and landing. In lower picture is instrumentation recording center in plane No. 3 with Gene Candelore, Leo Mazon, and W. A. Traxler (all of Dept. 31) at posts occupied by flight instrumentation engineers during flight.

Wear and Tear of 50,000 Flights Reproduced in 880 Water Test

Just how much punishment a Convair 880 fuselage can take in 50,000 flights—or a lifetime of 20 years—will be measured in tests starting soon at the Convair SD test facility at the seaplane ramp.

The 880 pressure cycle article (No. 99-4) is now in place in the large 20x110-ft. hydrostatic tank. The test article, a complete 880 fuselage with stub wings, will float submerged under a foot or so of water with the wings, protruding through "rubber boots" in the tank's walls, supported on jigs outside of the tank.

The tank will be filled with water and actual testing started in about two weeks, said W. E. Wise, structural test lab group engineer. The test program is scheduled to continue throughout most of the next year.

It will take at least four hours to fill the tank with the 394,994 gallons of water needed to cover the fuselage which takes up three-fourths of the space in the tank. (In fact, the snug fit leaves only 10 inches at one end and six at the other!) Water will flow into the plane through open cargo hatches at the same time the tank is filled. Divers will go into the tank after it is filled and close the plane hatches.

The test program will be divided into three distinct sections: fatigue, fail-safe, and allowable damage tests.

During fatigue testing, which will take about four months, the 880 fuselage will be loaded at 11 points to simulate actual air loads of flight, landing, and taxiing. Aluminum straps on the plane are attached to steel whiffletrees under the fuselage which, in turn are connected to hydraulic cylinders outside the tank. Electrical controls set up automatic cycling periods to put the various loads on the fuselage and representative wings. A dry run of the cycling system will be made this week before the tank is filled.

To load the fuselage for inflight conditions, the hull is pressurized (that is, more water is pumped into the already full fuselage, causing it to expand) at the same time load is applied. Landing is simulated by release of water pressure and reduction of flight load.

Principle of fatigue testing is to start with a production structure and keep repairing it to see just how the life of the plane can be extended. But during the next testing series — the fail-safe — any damage done to the fuselage under loading is purposely not repaired. Cracks are measured for rate of growth to see how large they can be before actually endangering the plane.

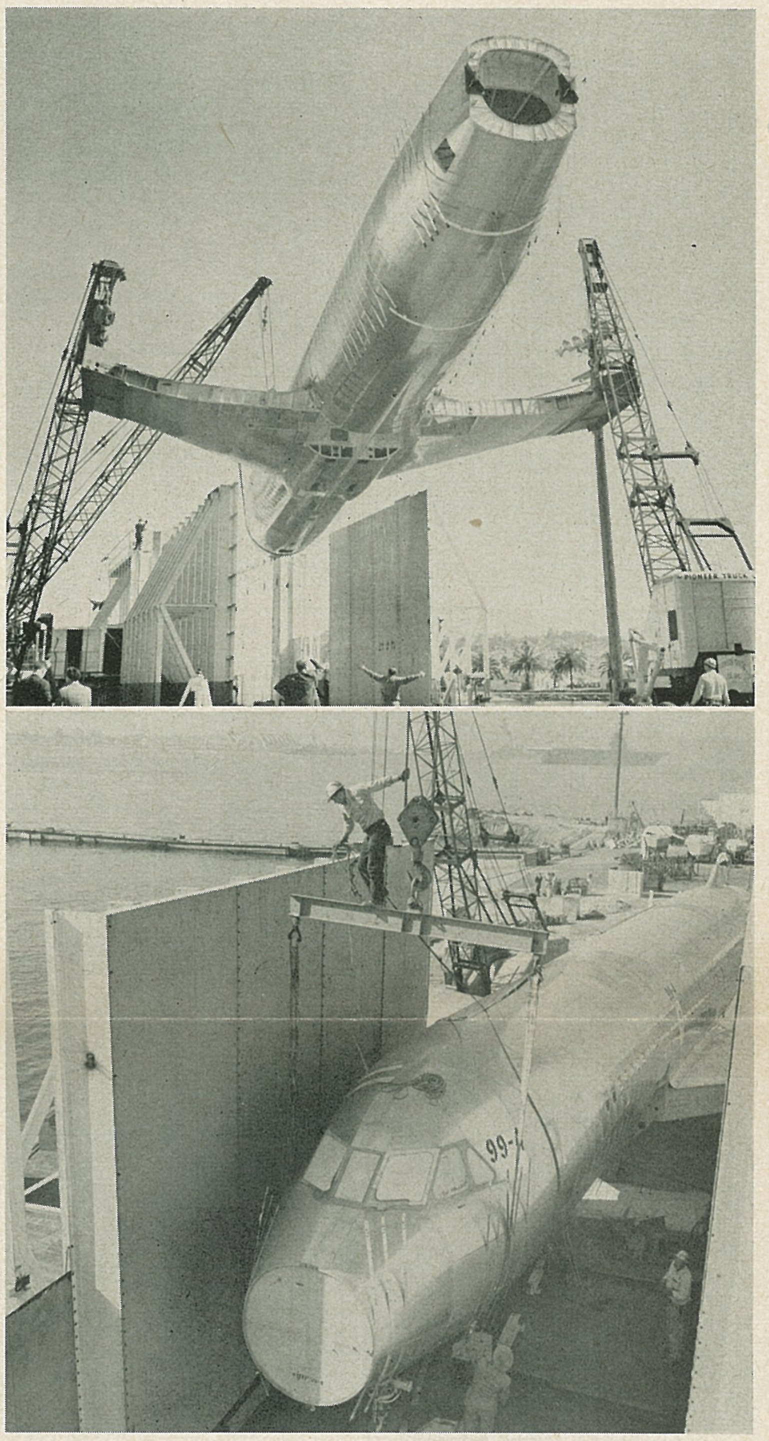
"During the last part of the testing, allowable damage tests, failures will be allowed to grow until a major break appears in the fuselage or a wing breaks in two," explained Wise.

"Thus, an accurate timetable can be established on how long an 880 will fly after a crack appears before it will have to be grounded for major overhaul, or be too damaged for repair."

Obed Bobbitt, engineer on the project, will head a team of Earl Moore and Bob Callahan (both of Dept. 31) who will be diving into the tank several times a day to check the fuselage for failures and to record fatigue cracks and damage growth.

The men recently completed an underwater training course in preparation for their duties in the huge tank.

Structural tests are being conducted under water as a safety measure for the men recording the induced cracks and damages at close range. The same tank was used for tests on the R3Y, Convair seaplane transport.



INTO THE TANK—A Convair 880 fuselage swings aloft as it is placed in huge hydrostatic tank at SD's structures lab facility at seaplane ramp. Fuselage will be completely submerged when tank is filled soon to begin long series of under-water tests.

Instruments Leave 880 Not a Speck of Privacy

From a spot high atop a Marine Base building, a Convair SD cameraman is recording takeoffs and landings of the No. 1 880 jet transport.

As one cog in the machinery that records every pulse beat of the plane during flight testing, Jack Gavett, instrumentation cameraman, points a Fairchild photographic flight analyzer at Lindbergh Field's main runway to catch the 880 in action.

Rate of acceleration and climb, together with braking, is graphically recorded with a complete image of the plane caught in every 1.7 degree of motion on an 8x10-in. glass plate. Digital counters on the camera are caught in the photographs to give the exact elapsed time in seconds and micro-seconds.

While the camera is shooting pictures of the 880, a complete instrumentation recording center in the plane itself is keeping track of every function within a multitude of systems.

The most modern electronically-controlled instruments record every thermodynamic and aerodynamic value—every test factor pertaining to power plant performance and aircraft stability and control.

"It is a far cry," said R. B. Thompson, general foreman of experimental instrumentation, "from the days of 'knee-pad' recording when pilots jotted down flight test data on notebooks strapped to their knees."

Present-day instruments can take down 20 values per second!

Data cameras, shooting into two-way mirrors, allowing visual monitoring of gauges; multi-channel temperature recorders; digital counters which measure fuel quantity and rate of consumption within a tenth of a gallon are but part of the instrumentation equipment which takes all the guessing out of the 880's capabilities.

"Average accuracy of the recording of 360 data points is within a half of one per cent," explained T. R. King, foreman in charge of installing the instrumentation in the test planes.

The first two planes which go through the flight test program (Nos. 1 and 3) are equipped with about 6,000 pounds of airborne instrumentation.

While in-flight data is being recorded right in the plane itself on film, graphs, or tape, information is being telemetered to the engineering test center. It takes data handling personnel several days to reduce data gathered during a normal two-hour test flight.

Flight instrumentation of SD experimental (Dept. 31) installs all test equipment while the plane is on the production line. More than 20 transmitters are installed on the wings and tail. About 50,000 feet of wiring connects the 10,000-15,000 electrical points!

Engineering instrumentation (Dept. 6) experts man the recording center during flight as well as the data handling ground station in Bldg. 54.

Walt Withee on Tour Of Bases in Europe

W. W. Withee, Astronautics' assistant chief engineer-test, is on tour this week of North Atlantic Treaty Organization bases in Europe. He is with a party headed by Lt. Gen. C. S. Irvine, AF deputy chief of staff-materiel.

Dempsey Taking Lead In Arrangements For SD Science Fair

A group of Convair men, headed by J. R. Dempsey, Astronautics manager, are taking active part in arranging the Fifth Annual Greater San Diego Science Fair set for early April.

Dempsey is chairman of the board for the 1959 fair. R. F. Smith of Astronautics is chairman of the committee on judging and awards. He is being assisted by E. W. Thurston Jr., also of Astro. LeRoy Fitzgerald of San Diego Division heads the finance committee, while Ronald Nall of the same division is in charge of scientific tours.

San Diego County science students in the 7th through the 12th grades participate, preparing scientific projects for judging. A series of school competitive events are held during March. On April 4-5 a display of winners will be held in Balboa Park.

Omaha, Spokane and Topeka Slated to Get Atlas Bases

Initial Air Force ballistic missile squadrons equipped with the Convair Astronautics-built Atlas ICBM have been assigned to two commands, according to latest Air Force information.

Strategic Air Command, commanded by Gen. Thomas S. Power, will direct activities of Atlas bases. SAC has announced that the Atlas is slated to achieve operational capabilities by mid-1959.

Initial Atlas complex is nearing completion at Vandenberg AFB, California. SAC's 1st Ballistic Missile Division, commanded by Maj. Gen. David Wade, has headquarters at Vandenberg. It is a combined operational and training base.

Work is well advanced on an Atlas facility at Francis E. Warren AFB near Cheyenne, Wyo. Next Atlas bases will be at Offutt AFB, Omaha, Neb., with work slated for start in early 1959; Fairchild AFB, Spokane, Wash.; and Forbes AFB, Topeka, Kan. Others are to follow, and Convair Astronautics will assist the Air Force in the installation of training facilities at Sheppard AFB, Texas, and Chanute AFB, Illinois.

Atlas squadrons at Vandenberg, Warren and Fairchild are assigned to the 15th Air Force with headquarters at March AFB, Calif. Those in Kansas and Nebraska report to the 2nd Air Force with headquarters at Barksdale AFB, La.

Seven U.S. Senators Tour Astro's Plant With Dempsey Host

Seven members of the United States Senate, plus members of their staffs, were special guests at Convair Astronautics early this month.

The visitors were Sens. Norris Cotton (R-NH), Alan Bible (D-Nev), Howard W. Cannon (D-Nev), Thomas E. Martin (R-Iowa), Frank E. Moss (D-Utah), Roman L. Hruska (R-Neb), and Strom Thurmond (D-SC).

Host for the one-day visit and tour of Astronautics plant facilities was J. R. Dempsey, Astro manager, and members of his staff.

The senators came to San Diego by air following a tour of Vandenberg AFB.

'Send to Me Your Ideas On How to Cut Costs,' Coggan Asks Division

"Send me your ideas on how to reduce operating costs," B. F. Coggan, San Diego Division manager, asked today in kicking off a four-month campaign to improve cost reduction in the division.

"We are bidding for new business, both commercial and military. In order to get it we MUST be the lowest cost quality producer. In addition, we must produce our present articles at the lowest cost possible to be competitive to the maximum degree.

"I want you to 'lend me your brains' to bring this about."

Coggan indicated that the campaign starting today and extending until July 31 will supplement the Employee Suggestion and Cost Improvement Proposal programs which continue in operation as they have for many years.

"Within our division we have more than 24,000 thinking individuals. They represent a tremendous reservoir of constructive ideas on how we can operate more efficiently and at reduced expense. To tap this resource more effectively, I ask that during this period you send your 'RX' (Reduce Xpense) ideas direct to me. They will receive personal and prompt attention."

(Details of the campaign, and dollar rewards for the most productive ideas, appear elsewhere on this page.)

"Practically all of our present business is 'fixed price.' We must operate below the price level to which we are committed. We can do this only if we obtain the greatest cost efficiency," Coggan continued.

"This problem is not Convair's alone. In fact, it has international scope.

"We defense contractors—Convair and the rest of the 'Big Leaguers'—MUST deliver at least one dollar of quality product to our government for every defense dollar. If we fail, then our national defense cost conceivably could become such a crushing financial burden that we could not afford to defend ourselves! The Soviets could lick us via the economic route, without firing a shot.

"Further, and of like importance to economy in defense, is the commercial side of our business—the Big Leaguers' battle for U. S. and world business. Foreign trade is vital to our economy and there are positive indications that in many areas U. S. industry is pricing itself out of the world markets. In our industry, as in many others, we must hold down our costs and maintain high quality in order to compete with our world competition.

"In our business there has been a stealthy upward creep of product costs. Our job is to reverse these trends."



"REDUCE XPENSE"—That is what the "RX" signs mean which have been posted through SD plants. B. F. Coggan, SD Division manager, pictured here, explains why a special four-month cost reduction program is in progress, starting today.

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Convairiety

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.

Convair Divisions Lead Air Industry in Safety

Convair's four major divisions placed first, second, third and fourth in the 1958 National Safety Contest for aircraft manufacturers conducted by the National Safety Council.

For the second time in three years Convair Pomona won first place in the contest. Convair San Diego, which was first last year, placed second; Astronautics Division, which was second last year, placed third; and Convair Fort Worth was fourth, after placing seventh last year.

The contest is judged on the basis of the accident frequency rate of each participating company. This rate indicates the number of accidents occurring per million manhours worked. Pomona's rate was .31, SD's was .45, Astro's was .60 and FW's .69. Average among all competitors was 2.15.

"Convair is a veteran of many firsts. Your unprecedented accomplishment in winning all four of the National

(Continued on Page 2)

Convair FW Winner Of Atom Plane Nod

Convair Fort Worth has been selected to work with the Nuclear Propulsion Division of General Electric Co., in the initial design of a nuclear-powered bomber prototype, according to an Air Force announcement.

Selection of Convair came after evaluation of design proposals of Marietta Division of Lockheed Aircraft Corporation and Convair FW. Work on the aircraft nuclear propulsion program will continue to be concentrated on the development of the propulsion system.

'RX' Cash Rewards To Total $8,000 For Four Months

Creative thinking will be at a premium for the next four months at San Diego Division.

A campaign is under way, called "RX" (short for Reduce Xpense), involving a special call for cost reduction ideas. Dollar rewards to individuals will total $8,000.

The campaign starts today (April 1) and will continue to a climax July 31.

"RX" ideas will supplement the regular flow of Employee Suggestions and Cost Improvement Proposals. They will be unique, however, in that they must be sent direct to:

B. F. Coggan, San Diego Division manager, Bldg. 1, through the company mails.

They will receive prompt acknowledgement and personal attention.

DO NOT PLACE "RX" IDEAS IN SUGGESTION BOXES. SEND THEM DIRECT TO COGGAN.

"RX" ideas may be submitted in any form, in writing, but preferably on an ES or CIP form. Senders must print their names (and sign). Include department, clock number, plant, building and column location. BE SURE to identify at the top that this is PROJECT "RX."

Object is to utilize to the fullest the ingenuity and constructive thinking of Convair SD's more than 24,000 employees in trimming operating costs.

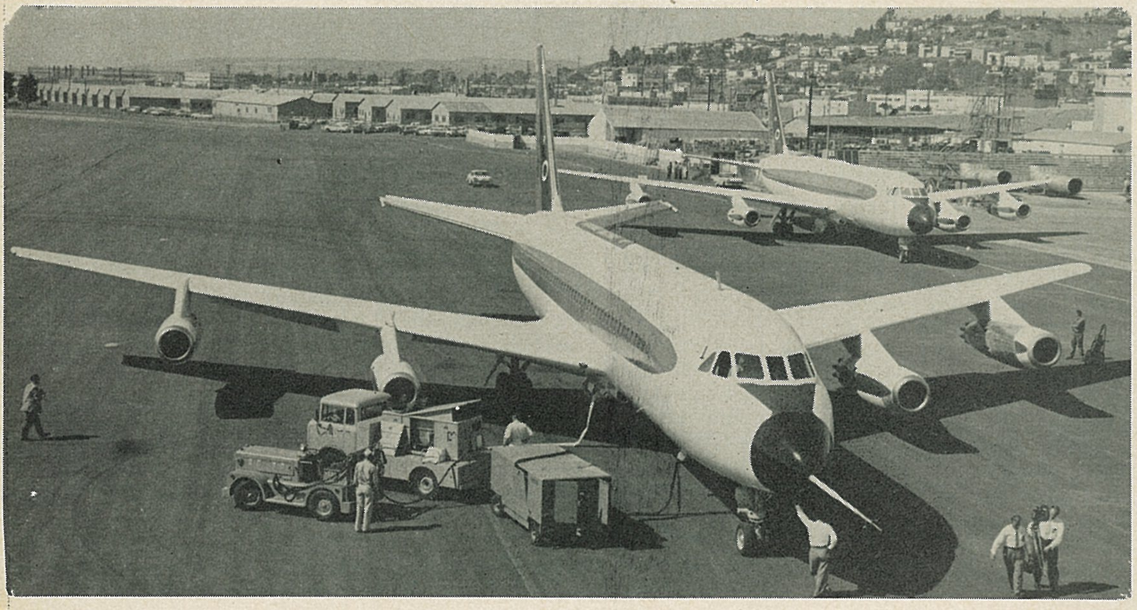
"RX" ideas must be specific and NOT mere generalities such as "Don't Waste Materials." They should call attention to processes that could be improved, resulting in more efficient operation, or to new ways to make the best use of materials, or ways to do a job in the least amount of time, etc.

All SD Division employees, except personnel of industrial engineering department and members of the division manager's staff, are eligible to send in "RX" ideas and be considered for rewards.

Each month during the campaign Division Manager Coggan will review the "RX" ideas which have been submitted during that period and select the top two. Author of the best will receive $1,000 and $500 goes to the runner-up.

At the end of the campaign, the best of the four first place winners will be chosen. The author will receive an additional $2,000 Grand Prize.

In addition, the "RX" ideas submitted are eligible for cash return under the Employee Suggestion system (in cases where the employee himself is eligible).



880 TWINS—Third Convair jet transport and second to fly joined its sister ship, plane No. 1, in field operations location as it was rolled out of final assembly at Convair SD Plant 1 recently. It will enter flight test program this week.

Another 880 First Flight Slated From Lindbergh Field This Week

The second Convair 880 jet transport to go into the flight test program at Convair San Diego is slated to take to the air this week.

Plane No. 3 was rolled out of final assembly two weeks ago (March 17) and has been in field operations since then in preparation for its first flight. John Knebel, Convair SD test pilot who has been co-pilot with Don Germeraad, chief test pilot and pilot of the first 880, is scheduled to be pilot of the plane.

It is this 880 which is due to be flown to Las Vegas, Nev., this month to go on display at the first World Congress of Flight.

The first 880, which has been undergoing flight tests the last two months, reached an altitude of 40,000 ft. to check out equipment at that level and attained maximum speed of Mach .93, or approximately 615 mph, during recent flights.

Meanwhile, repairs to No. 1 880 were being rushed at Edwards AFB where the airplane made an unscheduled landing last week when a portion of the vertical stabilizer and rudder was lost during a high speed test dive.

Pilots Don Germeraad and John Knebel brought the plane safely down on the desert lake bed. The aircraft was at 26,000

(Continued on Page 2)

"RX" Procedure in Brief:

Specific, practicable ideas for cost improvement are needed.

Write them out (preferably on ES or CIP form), include name, department number, clock number, plant, building and column location, and sign. At the top, write Project "RX."

Place in company mail to B. F. Coggan, SD Division manager, Bldg. 1. DO NOT PLACE IN SUGGESTION BOX.

One prize of $1,000 will be awarded each month for the best "RX" idea and one $500 prize each month for the second best. At the end of the four months, the best of the four $1,000 winners will receive an additional $2,000 Grand Prize.

Where eligible, authors of all "RX" ideas submitted will be considered for Employee Suggestion cash also, if their ideas are adopted.

Large Field Seeking Club Scholarship

First evaluation of the 80 boys and girls entered in the Convair SD Management Club scholarship contest was held last week with the winning boy and girl to be announced early in April.

The field was narrowed to about half the original number. The students remaining in the running are required to take an IQ test and write an essay.

Committee members in charge are M. L. Sweeney, T. F. McAleer, Louise Cathcart, R. L. Harmon, W. S. Nader, C. T. Boyle, and H. E. Mayer.

Dynamics' Backlog Set at $2 Billion

General Dynamics Corporation closed 1958 with a business backlog of more than $2 billion, President Frank Pace Jr. told shareholders in the annual report issued last week.

Calling 1958 a period of outstanding achievement for the company, Pace reported that sales were $1,511,456,261, second only to the record year of 1957 when the figure was $1,562,538,900.

With an estimated $2,095,000,000 backlog at the end of 1958, Pace said that an estimated additional $645,000,000 in contracts was in negotiation as of Dec. 31, 1958.

Earnings per share based on 9,909,822 common shares outstanding were equivalent to $3.71. This compares to $4.80 per common share based on 9,224,419 common shares outstanding at the end of 1957. The increase in common shares outstanding for the year 1958 was primarily the result of conversion of the corporation's 3½ per cent convertible debentures into common stock.

Pace told shareholders that expansion and speed-up of corporate research and development programs have entailed large financial outlays. He pointed out that research and development costs for the 880/600 jet airliner program amounted to $24,012,620 in 1958. It is expected that they will exceed this figure in 1959.

"As is true in every new venture," Pace said, "serious problems and financial risks face us at the beginning, but the long-term potential is so great that the directors and I look forward with confidence . . ."

He listed as examples of the corporation's "unique capability": orbiting the Atlas earth satellite; Atlas full-range flights; voyages of USS Nautilus and USS Skate under North Pole; 60-day submergence of USS Seawolf; successful builder's trials of world's fastest submarine, the Skipjack; invention, design and production of nuclear research reactor "Triga"; performance of B-58 Mach 2 bomber; roll-out and early test flights of 880.



ON LOCATION—L. L. Hedgecock and C. C. Pitts, Convair SD motion picture section cameramen (at far left), in process of filming prize-winning F-102 movie at McChord AFB, Tacoma, Wash.

Convair Movie Film About F-102 Wins National First Award

An F-102 film, shot by Convair SD cameramen, won a first-place award from the Industry Film Producers Association at March 20 presentations in Los Angeles.

The award, first ever won by a Convair-prepared movie, was for best in technical information.

The film, entitled "F-102 Turnaround Reservicing," was made at McChord AFB, Wash., during the summer of 1957 by L. L. Hedgecock and C. C. Pitts of the SD motion picture section.

Hedgecock directed and edited the film which was a progress report showing the step-by-step method involved in reservicing the F-102A from the time the power is shut off after landing until it is ready to go on another air defense scramble. The film has now been made available to all F-102 squadrons in ADC.

Initiating and setting up requirements for the film was the operations engineering group of Convair SD Dept. 6. Charles Tuck acted as technical adviser.

Accepting the plaque on behalf of Convair was H. J. Richardson of SD military relations.

Cal. Supreme Court To Admit SD Man

William R. Richards, Convair SD purchasing contract analyst at Rose Canyon, will be sworn in and admitted to practice before the California Supreme Court April 7 in Los Angeles.

He was notified that he passed the California state bar exam last month.

Convair Divisions Win Safety Awards

(Continued from Page 1)

Safety Council's top positions for 1958 is in keeping with this outstanding tradition. These reflect personal contributions of every man and woman associated with Convair and represent a fitting tribute to Convair's high standards of performance. Congratulations on another splendid achievement," Frank Pace Jr., president of General Dynamics Corporation, commented.

M. C. Val Dez, Convair SD chief safety engineer, while expressing satisfaction with the division's 1958 record in the frequency contest, indicated that he was even more pleased by word that the division will receive an Award of Merit for its sustained safety record over the last three years.

"During those three years we have rated 60 per cent better than what is considered the industry 'par' for frequency, and 37 per cent better than par in severity," he said.

★ Convairiety ★

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SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Another 880 First Flight Scheduled From Lindbergh Field

(Continued from Page 1)

feet about 20 miles south of Catalina Island at the time, flying at near the speed of sound "under artificially induced conditions set up to test vibration and flutter limits," August C. Esenwein, Convair executive vice president, said.

Also on board were R. M. Bloom, L. R. McClain, and A. E. Hunt, flight test engineers.

Plane No. 2 is still undergoing extensive structural tests at the seaplane ramp test facility.

Wing parts for the 12th Convair jet transport were to join wing sections of planes No. 10 and 11 in the wing bucks in SD Plant 1's Bldg. 2 this week. Wings of plane No. 10 are scheduled to go into the Scotchweld oven next week.

Planes No. 6, 7, and 8 are in primary mate with overwing barrel and underwing canoe mated, while plane No. 9 will go into wing mate this week.

Planes No. 4 and 5 will be the first fully trimmed 880s with the fourth complete transport due to move into final assembly this week. Plane No. 5 is still in major mate. Both planes will have interior completed and seats installed.

Pearson Appointed To F-108 Wing Staff

Completing the project staff on the F-108 wing program at Convair SD is the appointment of N. P. Pearson.

Pearson was named by SD Division Manager B. F. Coggan to coordinate and direct all of the factory activity relating to the F-108 wing program. According to J. H. Famme, works manager at Plant 2, it is the first time that a project man in the factory has been appointed for any major Convair program.

Pearson will be directly responsible to the factory manager in all areas within the factory at Convair SD Plant 2. He will report functionally to W. S. Stroud, director of the F-108 wing program.

General foreman of the Model 8 wing and tail since 1953, Pearson has been with Convair SD since 1935.

Convair Toastmasters Elect Harry Morgan

Harry Morgan of Convair SD Dept. 6 will be installed as president of Convair's Toastmaster Club No. 457 Monday (April 13) in the Astronautics executive dining room at 7 p.m.

Other officers to be seated are: James Carr, educational vice president; Art Redelsheimer, administrative vice president; J. Brown Herreshoff, secretary; Ken Iddon, treasurer; Andy Gormish, sergeant at arms.

Except for Carr and Redelsheimer, who are both Astro employees, the entire slate is from SD-Dept. 6.

Meetings are now held at 6 p.m. on Monday evenings in the Astro executive dining room.

50 Memory Pupils Sign for Classes

Fifty persons have made reservations for the first memory course sponsored by CRA at Convair SD.

They will attend the first of the two-and-a-half-hour classes tomorrow (April 2), starting 7 p.m. in the House of Hospitality, Balboa Park. Thereafter, they will be held every Thursday.

Donald Robinson, professional memory expert, is the instructor. He breaks the course into such subjects as study habits, numbers and formulas, objects, isolated facts, directions.

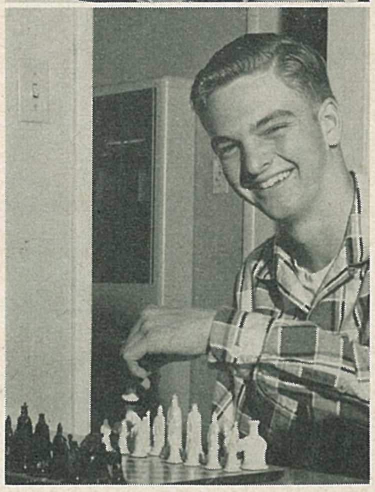
Reservations are still being taken at employee services, Plants 1 and 2. With CRA sharing a portion of the bill, the individual fee is $10.

Lancaster and San Diego Boys Win Scholarships

Two high school seniors—one from San Diego, and one from Antelope Valley—have been selected as winners of the fifth Convair San Diego sons scholarship contest.

Allan Roy King, 17, of San Diego and John Charles Rayko, 16, of Lancaster, Calif., were chosen by SD Division Manager B. F. Coggan and his staff to receive scholarships which to a large extent will take care of their college education in engineering or an allied science.





TOP SCHOLARS — Convair San Diego sons scholarship winners are shown with hobbies. At top, Allan King, 17, of San Diego solders wires for current project, electron microscope, while John Rayko (lower picture), Lancaster 16-yr.-old youth, makes move in chess game, at which he is too adept for most competition.

Allan, the son of George C. King, a senior design engineer at Convair SD, will graduate in June from Point Loma High School. His major in high school is mathematics with minors in chemistry and physics.

He hopes to enter Cal Tech at Pasadena this fall to begin work toward a degree in electronics or electrical engineering.

His interest in electronics extends to his leisure time, as he works with other friends on projects outside of school hours. At present they are deep in the construction of an electron microscope. His other recreational interest is sailing. He is president of the school's Science Club.

John Rayko will be a June graduate of the Antelope Valley Union High School. His father, Charles Rayko, is a field and service mechanic at Edwards.

His high school major was also mathematics which he plans to continue at college. He will enter the University of California at Berkeley this fall.

John is also president of the Science Club, a member of the honorary mathematics society, as well as Boy Scouts and Explorer Scouts. His hobbies include a wide range from chess, archery, rockhounding, to fishing and judo.

Both boys were A students in high school with John Rayko completing his high school work in three years.

Rivet Operator Slogan Winner

Louise Jimmerson, Dept. 218 rivet machine operator at Convair SD, won the plaque in the reliability slogan contest held by Depts. 217, 218, and 223 at Plant 2.

Her winning phrase, "Let's Aim at Reliability," and design was chosen from over 1,000 slogans submitted by 300 persons participating in the first contest held by departments in the Plant 2 reliability program, said R. A. Davis, Dept. 218 foreman who acted as reliability coordinator.

Runners-up receiving honorable mention certificates were Frank Hawksworth (Dept. 218), Clarence Leick (Dept. 217), L. L. Loya (Dept. 218), and Russ Frandon (Dept. 218).

According to B. L. Wolfe, general foreman of the three departments, the slogans were judged by hourly members of the reliability committee.

More Moves Made at SD

Moves last weekend saw over 100 engineering people relocated in the Bldgs. 5 and 51 rehabilitation program at Convair SD.

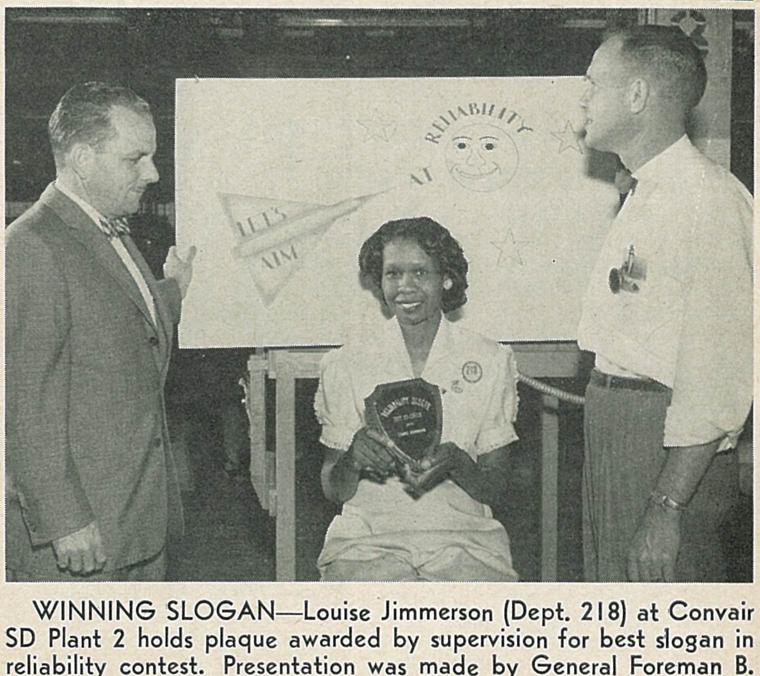
Product support office under Charles Brandt moved from the third floor of Bldg. 51 to the second floor of Bldg. 4 at Plant 1.

Seventy persons in projects specifications went to their permanent location on the third floor of Bldg. 5. They had been working on the southwest mezzanine of Bldg. 1.

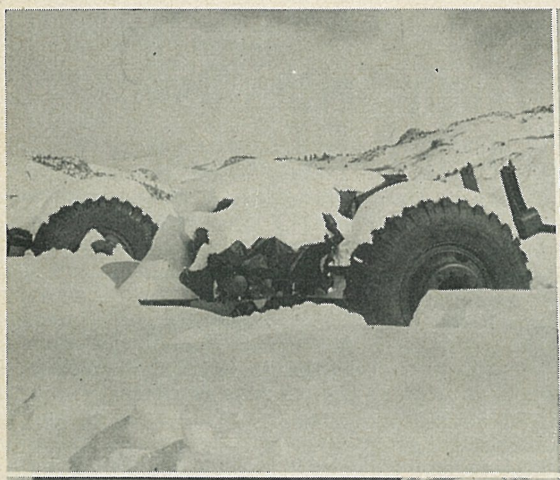
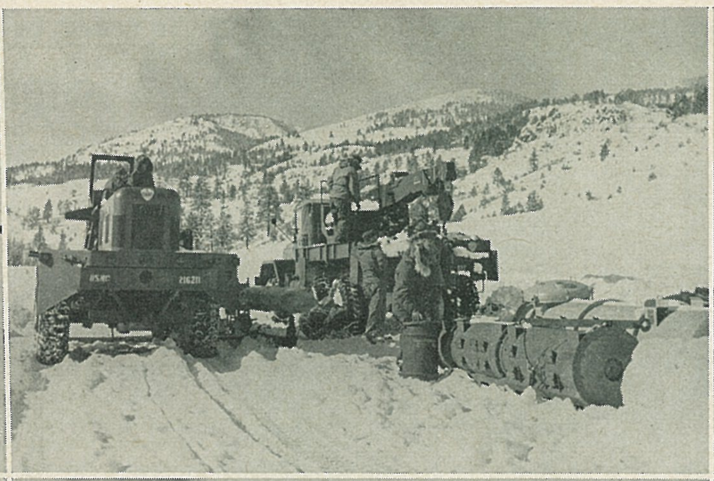
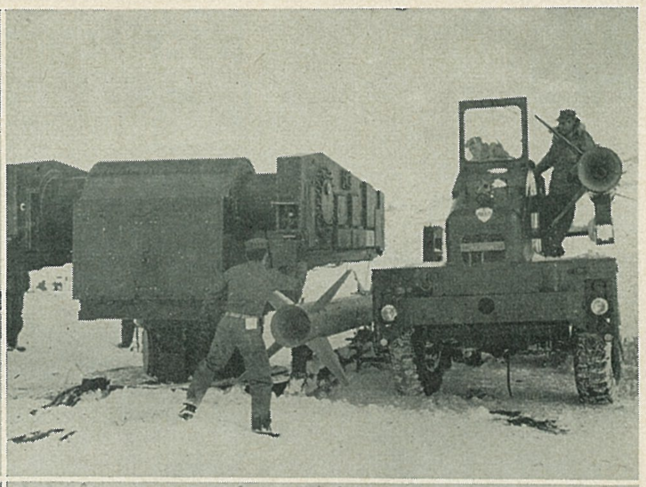
Going to the Bldg. 1 mezzanine from second floor of Bldg. 5 were 22 stations of engineering electronics lab purchasing group. Caught in the move were personnel of material programming who were rearranged on the mezzanine to make room for the incoming group.

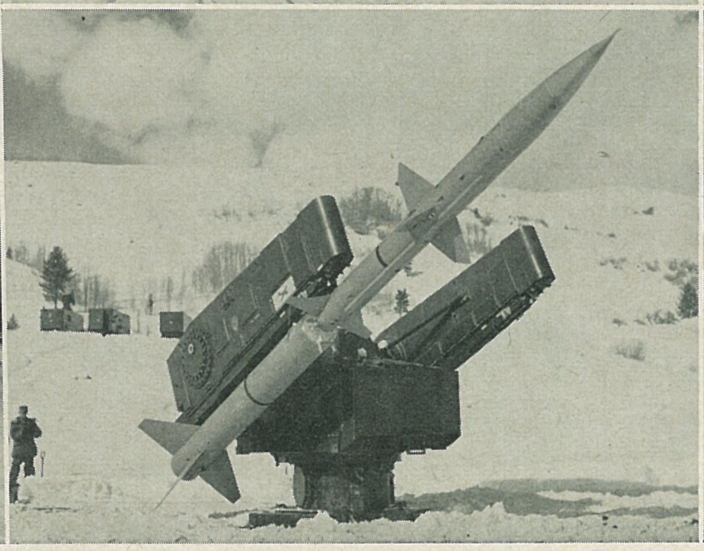
Standards group of engineering, involving 10 persons, came from Bldg. 4 to join the rest of the standards group on the third floor of Bldg. 5.

Face lifting of the exterior of Bldg. 5 fronting Pacific Highway was going into final stages of completion this week.



WINNING SLOGAN—Louise Jimmerson (Dept. 218) at Convair SD Plant 2 holds plaque awarded by supervision for best slogan in reliability contest. Presentation was made by General Foreman B. L. Wolfe, at left, while H. C. Griffin, Dept. 218 foreman, looks on.




RUGGED TERRIER—Marines found plenty of cold, plenty of snow for weather-testing Terrier missiles in High Sierras recently. Center above is missile assembly area. Crane is used to handle ton-and-a-half Terrier. Storage containers are in snow at right. In upper right photo, twin missile carrier delivers missile to loading position on launcher. Lower left: Convair Pomona representatives A. M. Grandfield and H. C. Stowers discuss tests with Maj. G. S. Mansfield, USMC, at rear of mobile test station, built at Convair Pomona. Lower right, Capt. J. K. Smola, Capt. R. M. Burke, 1st Lt. P. C. Flattery, Warrant Officer R. W. Green, all USMC.

World Congress of Flight Will See Atlas, B-58 and 880

Convair products will play a major role at the first World Congress of Flight in Las Vegas, Nev., April 12-19.

Convair's 880 jet transport and the Atlas ICBM are expected to make public appearances at the congress which is sponsored by the Air Force Association in co-operation with leading U. S. trade associations.

Besides the 880 and Atlas, Convair FW's B-58 bomber, the F-102 jet fighter interceptor built at Convair SD, and Convair Pomona's guided missile Terrier will be on display.

Flight demonstrations of the B-58 and F-102 will be held in addition to static exhibits.

Arranged to spread world knowledge of aircraft, missiles, and space craft, over 100 companies throughout the world have indicated their participation. Delegates from 35 countries will join in jet and space-age symposiums.

Florida Kids Helping To Change Language With New Definition

The younger generation is definitely of the missile age—in Florida, anyhow.

A book salesman was appearing before elementary school children on Merritt Island, residential suburb near AFMTC. Part of the sales pitch was to have them define dictionary and encyclopedia.

"And, do you all know what an atlas is?" the salesman asked.

"Sure," came the reply. "Convair makes 'em and fires 'em at Cape Canaveral!"

Murray Named To Omaha Post

Lester K. Murray, manager of Convair's Colorado Springs office for the past four years, has been assigned additional duties as acting manager of the Omaha office, T. G. Lanphier Jr., Convair vice president, announced.



Les Murray

Murray succeeds Gordon Graff who died March 7.

At the same time, Lanphier announced that Astronautics and Convair Fort Worth each has appointed representatives to the Omaha office in liaison capacities. Astro's representative is W. J. Bettens, assistant design group engineer, and FW's is A. S. Witchell Jr., former chief pilot on the B-58 test program and most recently in customer service.

Murray has been with Convair since 1945, first in aircraft and guided missile flight test engineering and later as assistant to the vice president-long range planning. He was a World War II flyer and won the Distinguished Flying Cross.

SD CLUB CARNIVAL SET FOR APRIL 15

Balboa Park Club will be the setting for the Conavir SD Management Club's annual "Carnival night" and nomination of officers April 15.

Tickets for the affair, sponsored by fabrication departments, Plants 1 and 2, are now on sale through department representatives.

Nomination of officers, which usually adds a carnival atmosphere all its own, starts at 8 p.m.

A buffet-style dinner will follow the social hour which begins at 5:30 p.m.

Plant 2 is 'Bright as Broadway' Under New Fluorescent Lights

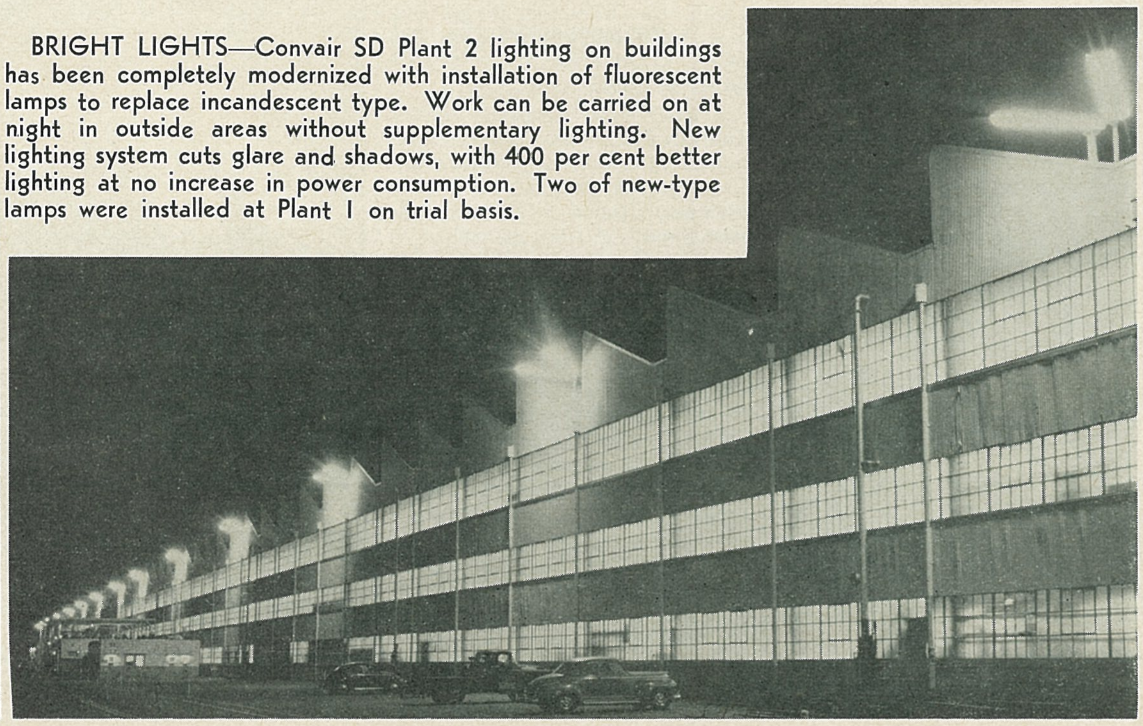
Outside lighting at Convair SD Plant 2 has been completely modernized with installation of fluorescent lights on all major buildings to replace the old-type incandescent lamps.

Work on the new lighting was completed under a $39,142 contract with the SD branch of Fischbach and Moore, general electrical contractors, Harry A. Smith, SD chief plant engineer announced.

Design of the layout to provide approximately 400 per cent better lighting for Plant 2 at no increase in power consumption was done by plant engineering department under supervision of W. E. Brautigam, electrical and utilities supervisor.

The new fluorescent lighting makes it possible for work to be done in the outside area at night without supplementary lights, explained Brautigam. The new lamps provide better light distribution with less glare. Life for each of the new lamps is estimated at 7,500 hours compared to the 1,000-hour lifetime of an incandescent lamp.

The 178 new fixtures and lamps light a total area of 860,-000 sq. ft.



BRIGHT LIGHTS—Convair SD Plant 2 lighting on buildings has been completely modernized with installation of fluorescent lamps to replace incandescent type. Work can be carried on at night in outside areas without supplementary lighting. New lighting system cuts glare and shadows, with 400 per cent better lighting at no increase in power consumption. Two of new-type lamps were installed at Plant 1 on trial basis.

Snow and Sub-Zero Cold Fail to Daunt Terriers During Mountain Tests

BY JAMES COMBS JR.
(News Editor, Convair Pomona)

The first cold weather tests ever conducted in the field by the U. S. Marine Corps on Convair Pomona's Terrier surface-to-air missile and its associated equipment were completed recently.

The tests were conducted during the first two weeks of February at the Marine Corps Cold Weather Training Center at Pickel Meadow, in the High Sierras near Bridgeport, Calif. Tests were conducted by "C" Battery, First Medium Anti-Aircraft Missile Battalion, augmented by necessary service troops, under the command of Capt. J. K. Smola, USMC.

Although exhaustive cold weather tests have been conducted on Terrier and other associated equipment in laboratories, at temperatures down to 60 degrees below zero, this was the first time that the missile had been subjected to extremely cold weather in the field.

It was also the first time that the entire Marine Corps Terrier missile system—the missile, launchers, radar, test equipment, etc.—had been subjected to cold weather tests as a complete system.

Among the equipment included in the tests were Convair Pomona-built AN/MSM 13 mobile missile test unit (**Convairiety** Nov. 27, 1957 and July 9, 1958). This is a truck-mounted mobile test station for units of battery size.

Except for minor discrepancies, which were corrected on the spot, Terrier and all of the associated equipment functioned properly throughout the tests.

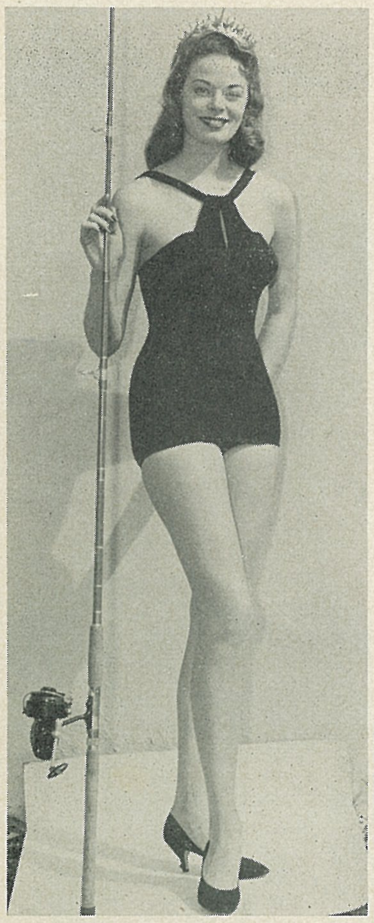
(The Terrier system had already been proven suitable for desert climates through years of tests and routine operations at the U. S. Naval Ordnance Test Station at China Lake, and the Marine Corps Base at Twenty-nine Palms, both located on California's Mojave Desert. Terrier has also been subjected to all types of climatic conditions encountered at sea during tests conducted aboard the USS Norton Sound and USS Mississippi and operations aboard the USS Boston (CAG-1), USS Canberra (CAG-2), and the USS Gyatt (DDG-1).

Convair Pomona's A.M. "Al" Grandfield of engineering field services and H. C. "Herb" Stowers of engineering electronic test equipment group were present during most of the test period at Bridgeport. However, the tests were conducted entirely by U. S. Marine Corps personnel.

During the first week of the tests the weather remained relatively mild. Grandfield, who was in daily contact with R. W. Wollenweber, supervisor of field services at Convair Pomona, reported that the temperature was almost as high as that in the Pomona area during the day, although it dropped considerably lower at night.

On Monday of the second week, however, snow started falling and the temperature started dropping. By Wednesday, when a **Convairiety** staff member arrived in Bridgeport, at least two feet of snow had blanketed the area, and that night the temperature fell to about 15 degrees below zero. The following day the thermometer reached a high of approximately 15 degrees above zero.

All personnel participating in the tests (including Convair Pomona's representatives) were issued Marine Corps arctic clothing, which gave adequate protection against the extreme cold.



CONVAIR QUEEN — Beautiful Susan Beatty, 20, secretary in Dept. 15 at Convair SD, was proclaimed "Queen of the 1959 Yellowtail Fishing Derby" in San Diego which is under sponsorship of the local Junior Chamber of Commerce.

Convair Joins Pilot Society

Convair, a division of General Dynamics Corporation, recently became a corporate member of the Society of Experimental Test Pilots.

The society was founded in September of 1955 to unite the efforts of experimental test pilots toward promoting aeronautical design, flying safety, and the art of test flying through interchange of information, without affecting the competitive structure of the industry.

Convair engineering test pilots have from the beginning played an important role in the organization. R. L. Johnson (Edwards), former vice president of SETP, and D. P. Germeraad (San Diego) were elevated to the grade of associate fellow in 1958, and John Fitzpatrick (Holloman), former program chairman, was elevated to that grade last month.

C. E. "Chuck" Meyers (Edwards) served as secretary last year and was elected vice president this year. W. H. Harse and J. K. Stuart (both Edwards) and J. M. Elliot (San Diego) have been members since 1956. Harse is currently serving as chairman of the escape and equipment committee.

Present activities of SETP are centered about the air collision problem and the contribution of the professional test pilot to the space age.

Tracy Brooks In New Post

Tracy Brooks has been appointed to the new post of college relations administrator for Convair, R. H. Biron, vice president-administration, announced.

Brooks, formerly executive development administrator for Convair SD, will coordinate the recruiting activities of all divisions of Convair.

A native of Chicago, Ill., Brooks came to Convair SD in February of 1945 as a job analyst in industrial relations. In 1946 he transferred to engineering as personnel engineer and was appointed engineering personnel administrator in 1948. A year ago he was named administrator of executive development.

Brooks holds a B.S. degree in business administration from the University of Michigan. Before joining Convair he had been a management consultant for Booz, Allen and Hamilton in Chicago, and previous to that personnel manager at U. S. Cartridge Co. of St. Louis, Mo., and Carnegie-Illinois Steel Co., Chicago.

CONVAIR DAUGHTER TV STAR AT AGE 4

A veteran trooper at 4 years old, little Bobbie Lynn Cardenez, daughter of Clarita Cardenez of Convair-SD Dept. 603, is now appearing weekly on television.

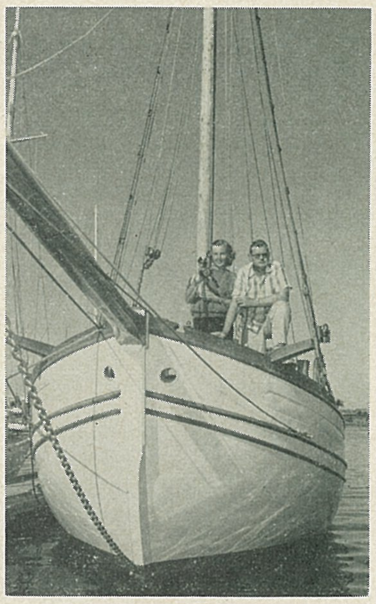
Bobbie, who has been doing her special tap dance and acrobatic routines before the public since she was 2½, is being featured on the Vincent Marasco TV Showhouse over Channel 6 Friday evenings and Saturday mornings.

Television is nothing new to the little performer who has already danced on Panorama Pacific, Queen for a Day, and the Harold Keen show.

A specialty is the cane dance, which is rarely attempted by children under 10. According to her mother, Bobbie would rather practice her steps than play. "In fact, to Bobbie, her dancing IS play!"



TROUPER—Little Bobbie Lynn Cardenez receives plaudits from her mother, Clarita Cardenez of SD Plant 2 (Dept. 603), and Byrd Holland, director of TV program on which Bobbie appears weekly.



BE-WITCHING—Fran and Vic Westfall (SD Dept. 129) proudly display new "home," 35-ft. Danish-built cutter, "Red Witch."

No Yard to Mow

Westfall Family Settles Down In Danish-Built Home Afloat

The family of Vic B. Westfall (Convair SD-Dept. 129-0) is settled in its new home.

In this case, the Westfall home is—as it has been for over five years—aboard a boat tied up at the Silver Gate Yacht Club on Shelter Island at San Diego.

But, as of a couple of weeks ago, Mom, Pop, Vicki, 11, Clyde, 9, and Chela, the family cat, moved into the three cabins of their new 35-ft. Danish-built cutter, called the only boat of its type in existence.

Westfall climaxed several years' planning when he took delivery of the "Red Witch" at Newport Beach last month. The boat, designed by the Copenhagen marine architect, Knud Hansen, from 150-year-old plans of an inter-island trading vessel, was built by a Danish boat-building family of three generations.

The sail boat had been in the building since August of 1957. "Unique features of the 'Red Witch,' as we have named her, attracted so much attention that she was kept in Denmark several months after she was finished so that people from all over Europe could see what she looked like," Westfall said.

The boat carries the original cutter rig with three head sails—a square sail, topsail, and gaff head main sail. It is the first boat, less than a 45-footer, to be built with a "great cabin aft" (cabin in the stern).

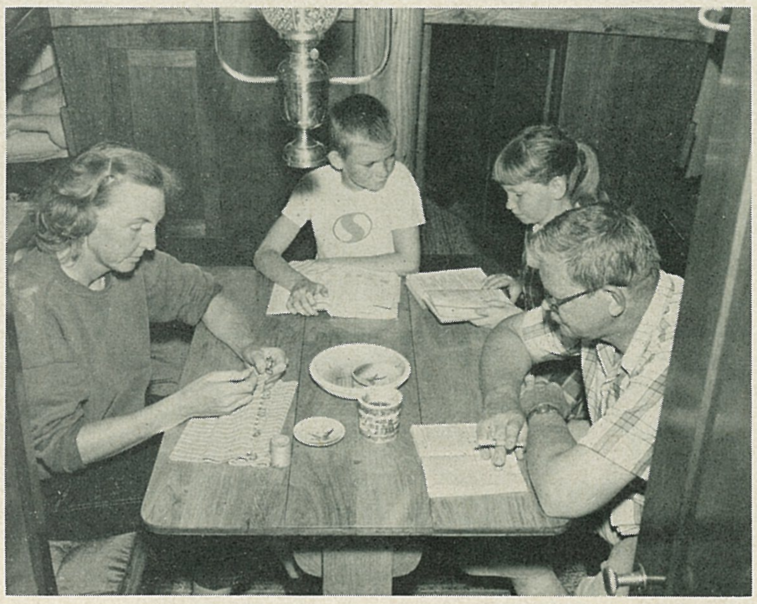
It sleeps six, two bunks in each of the three cabins. Each cabin has its own hatch and plenty of clearance—6-ft. head room. The boat is equipped with a Mercedes-Benz 37 hp engine for auxiliary power.

"It is strictly a cruising vessel," explained Westfall. "There is no electricity aboard. Kerosene is used entirely for all purposes—cooking, heating, and lighting."

Mrs. Westfall said that she enjoys the simplicity of keeping house in a boat. "It only takes half an hour to have everything spotless, and when the deck is hosed down, the yardwork is done, too!" Having two industrious brass polishers in the family makes the work easier yet as both Vicki and Clyde like to keep the knobs and fixtures shining.

Ordered through Scandia Imports of Newport Beach at a cost of $24,500, the cutter arrived in Wilmington aboard the SS Lionsgate after a month's voyage from Copenhagen

For the present the Westfalls will be sailing their "Red Witch" to nearby places on weekends, but eventually they hope to strike out on a world cruise.



COZY—The Westfalls (left to right)—Fran, Clyde, Vicki, and Vic—gather in main cabin of "Red Witch" for cozy evening of homework, reading, sewing.

Trick of 'Toe-Sliding' Trombone Takes Astro Man on Europe Tours

Brassy renditions of the "Twelfth Street Rag" on a slide trombone are fairly commonplace in jazz circles, but a Convair Astronautics man plays it with one foot!

That's right, he pumps the slide with one end firmly clinched between his first two toes.

Clyde Helmer, a member of Astro's communication department, has been utilizing this trick for almost a decade. It has earned him two world tours, a nationwide television appearance, plus the opportunity of performing before some 50,000 persons around the globe.

Helmer learned to toot his trombone at a Biwabek, Minn. high school. To break the monotony of rehearsals he used to slip off one shoe—and use his foot to work the slide. That started it.

Moving to California, Helmer enrolled at UCLA and forgot his old trick. He did gain fame as a trombonist with Red Nichols and Pete Daly and took his own group, the Rampart Street Six, to a Dixieland Jubilee in Los Angeles, considered the "world's series of jazz."

Armed with a music degree, Helmer found his career interrupted by a tour of service duty. He reported to Fort Ord and promptly landed a place in the base band.

"Musicians were plentiful and I knew sooner or later I would have to take up 'KP' duty, a disheartening chore to me," Helmer said. "So I revived my old trick and started to appear as a soloist and novelty act at base shows."

His fame spread and Helmer jumped from one service show to another. He transferred to Fort Lee, Va., and promptly won an Army talent show. He later appeared with Arlene Francis on her nationwide "Talent Patrol" TV program.

Next came an invitation to tour Far East Army bases and he tooted and pumped across Alaska, Formosa, Okinawa, Japan, Korea, Hawaii, Panama and the Caribbean area much to the delight of the Armed Forces at each point.

Helmer came up for discharge, then turned around and signed as a civilian performer with the USO for a tour of Europe. This lasted six months.

Friends are still amazed at Helmer's contortions in playing "footsy" with his trombone. Six feet tall and 230 pounds, he has to "reach over" a 42-inch waistline.

Helmer is still a feature attraction in jazz circles at a Del Mar club called the Powerhouse. Few weekends go by that he is not asked to remove a shoe.

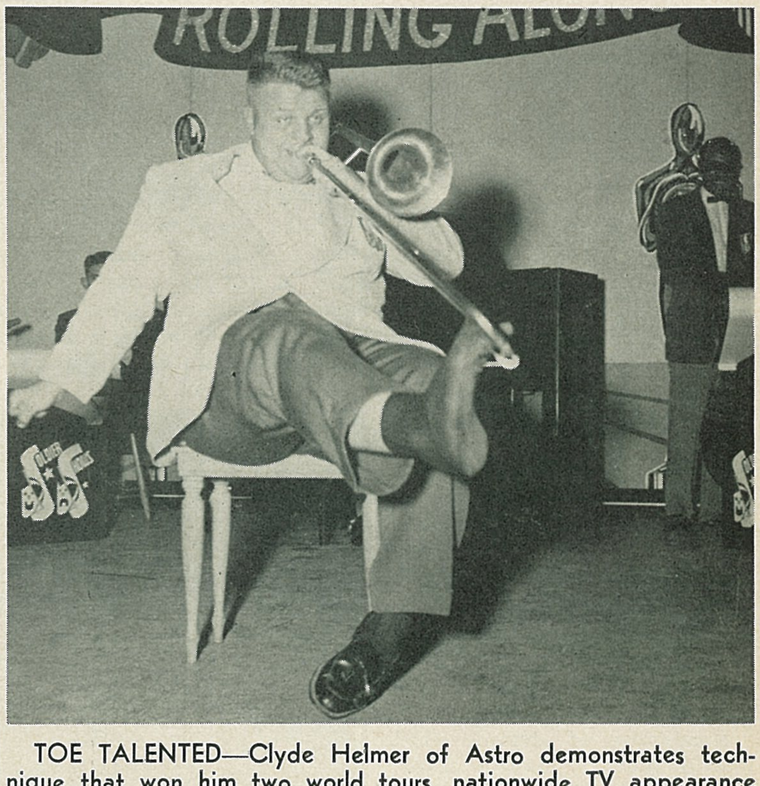
"It's old stuff now, but I still wear out a few pairs of socks each month," Helmer said.

Jet, Rocket Experts Attend Institute

About 100 jet and rocket combustion experts attended the March 23-24 session of the Western States Section of the Combustion Institute co-sponsored at San Diego by SD State College and Convair scientific research department.

Main banquet speaker was Dr. Edward P. Ney, professor of physics of the U. of Minnesota, who talked on "Van Allen Radiation Belts—Artificial and Natural."

Among subjects covered by the 15 technical papers read during the two-day meeting were problems of detonations in solid propellants and experimental research in high-energy fuels.



TOE TALENTED—Clyde Helmer of Astro demonstrates technique that won him two world tours, nationwide TV appearance and many fans while an Army enlisted man. Six-foot, 230-pound Helmer still performs feat before local audiences. His favorite is "Twelfth Street Rag."



"Let's just stand here and rest a minute . . . my feet are KILLIN' me . . ."

Stromberg-Carlson Stresses SCATE Sale

ROCHESTER — A new sales force with exclusive responsibility for the sale of SCATE—Self-Checking Automatic Test Equipment — in Stromberg-Carlson's Electronics Division has been announced.

SCATE is a pre-programmed, automatic computer-type test system which can reduce the time required to check modern weapon systems from hours to minutes.

SCATE can be adapted to test any missile, aircraft, or ground electronic system.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.

Electric Boat of Groton, Conn., submarines.

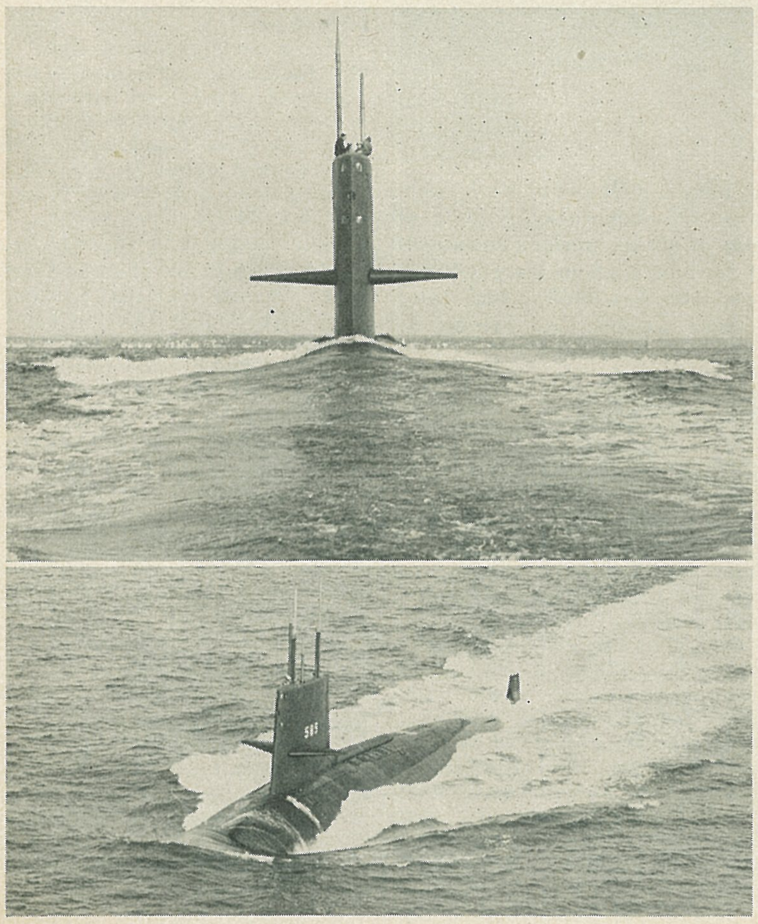
Stromberg-Carlson, of Rochester, N.Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N.J., electric motors, generators.

* * *



FLEET'S FLEETEST—World's fastest nuclear powered submarine, Skipjack, built by Electric Boat Division, shown in dramatic photos taken during builder's trials last month. Note blimp shape and diving planes on "sail" (formerly known as conning tower).

Guards Need Photo Memories To Keep up on Different Badges

Security guards at Convair SD aren't memory experts but sometimes it might help.

Seventeen new badges and three new identification cards issued last month to various customer representatives and other outside groups skyrocketed the total guards must remember.

For security's sake, guards must be familiar with roughly 600 signatures (those authorized to sign passes), 40 badges, 19 different identification cards and over 700 cars with in-plant clearance.

And many of the "old-timers" know the faces that go with the badges, cards, signatures and cars!

Sooner or later, because guards switch duty locations from day to day and change shifts every four weeks they become personally acquainted with the varying aspects of Convair SD's security set-up.

In addition, to enable guards to keep pace with changes, periodic classes are conducted by commanding officers.

"Headquarters" at both Plants 1 and 2 are the focal points of activity.

Located at each are master keys for Convair offices, buildings, files, etc. Close tabs are kept with the plant fire department and the San Diego Civil Defense set-up and in case of emergency both locations are equipped to take over the plant's loud-speaker and radio system.

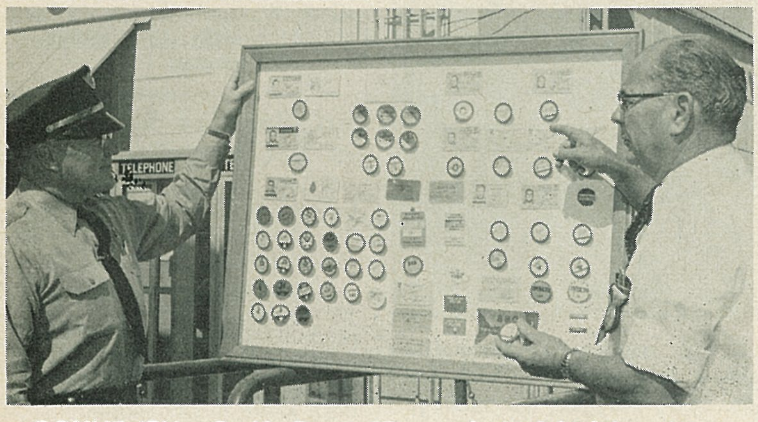
C. M. Durst, guard chief, said members of the security force come from all walks of life but that the majority have had some prior association with law enforcement in either the military or as police officers.

"Because they are constantly dealing with people, their job is one of public relations, also," Durst said.

'Space Exploration' Bossart Talk Topic

"Space Exploration Problems" was the topic of K. J. Bossart, assistant to Convair's vice president-engineering, at the March 26 meeting of the American Society for Metals at the Lafayette Hotel, San Diego.

Bossart's lecture was an introduction to this month's ASM educational program on space metals.



COUNT 'EM—C. M. Durst, SD guard chief (right), points out additions on badge board to Capt. John Cooper. Additional badges and cards issued last month swelled total guards must remember.

Canadair 540 Starts World Sales Tours

MONTREAL — First of three world sales tours of the Canadair-Convair 540 jet-prop transport began last month, when a 540 left Montreal for a 17-000-mile tour of the United States and Western Canada.

The 540, powered by two Napier jet-prop engines and developed from the Convair 240, 340, 440 series, will be demonstrated to airline operators, owners of executive aircraft and military authorities. A second 540 leaves late in April for a 25,000-mile tour of South America and a third is to leave in May for a tour of Europe.

The first 540 will visit 19 North American cities in the next two months and cover 12,600 miles in point-to-point flights. First stop is Utica, then on to New York, Washington, Atlanta, Houston, Dallas, Fort Worth, Las Vegas, St. Louis, Chicago, Detroit, Minneapolis, Winnipeg, Edmonton, Calgary, Vancouver, Seattle, San Francisco, and Los Angeles.

Electric Boat Gets Contract to Build Sub Missile Device

GROTON — Submarine sailors soon will operate nuclear subs and fire ballistic missiles from the ocean depths—without ever leaving port.

An electronic simulator, called the "submarine FBM (fleet ballistic missile) training facility," will make the land-based training of missile sub crewmen possible, according to an announcement made by the Navy.

Electric Boat has been selected to undertake the design and construction of the unique simulator's diving, steering and navigational systems under a $1½ million contract with the U.S. Naval Training Device Center, Port Washington, N.Y. The missile fire-control system has been assigned to Curtiss Wright, with General Dynamics responsible for technical integration of the entire project.

Senior Citizen In Retirement

A partnership of over 35 years came to a close last month.

Leo Bourdon, well-known and well-loved figure at Convair San Diego, has retired, ending an active association of man and company, dating back to pre-Convair days in Greenwich, R. I., and Buffalo, N. Y.

In point of service, Bourdon was Convair's most senior citizen.

He came to San Diego with Consolidated in 1935 and served in various capacities as superintendent and foreman.

Looking back, Bourdon recalls his association with Convair as a happy one. "It gives me satisfaction to think that I grew up with Convair, with mutual benefit to both of us," he said.

Bourdon, now 72, has not made elaborate plans for his retirement, but has always been an avid hobbyist.



ORVILLE WRIGHT—Just after completing a flight in De Haviland 4 is Orville Wright, left, and Howard Rinehary, chief pilot of Dayton-Wright Airplane Co.

Gallaudet Co. Dissolved After Study by Fleet

(Consolidated Aircraft, from which Convair stemmed, was created in 1923 from the assets of Gallaudet Aircraft plus designs and engineering talent from Dayton-Wright Co. Following is another installment in a continuing history of Convair which relates the end of Gallaudet and describes some of the early history of Dayton-Wright.)

When Reuben H. Fleet took over direction of Gallaudet Aircraft Corp. as general manager in the fall of 1922 (at a time when the company had lost nearly $3 million since World War I) the directors asked Fleet to study the operation from the inside for three months, then report back.

He did—with the conclusion that Gallaudet "has nothing worthy of perpetuity or continuity, and would not bring more than $100,000 if you could find a buyer." In addition, he reported that he wanted to form a company of his own, with his own resources, and offered the directors this proposition:

"I will finish off your contracts. Since labor will lag at cutting off its meal check, I will use the men on my own work as they are available, and pro-rate the labor costs. I will charge my salary fifty-fifty to you and me. I will use materials from your stock room on my own work, at cost plus 10 per cent. For rent, I will pay you 10 per cent of my own profits, if any. Thus, I will kill off your company to your best advantage while establishing my own."

The directors were deeply distressed, but decided to accept Fleet's offer. The major thereupon set about forming Consolidated, which he organized as a Delaware corporation with an authorized capitalization of $60,000 in shares of $100 par value. Actually, only $25,000 was issued; Fleet subscribed $15,000 and his sister, Lillian Fleet Bishop, $10,000. For aircraft designs and an engineer, he turned to General Motors, which had decided to close out its aircraft subsidiary (Dayton-Wright Co.) at Dayton.

* * *

Dayton-Wright had a history of its own.

In 1915 Orville Wright sold his Dayton factory and patents to the Simplex Automobile Co. syndicate and the next year entered into a period of informal collaboration with Charles F. Kettering, inventor of the auto self-starter.

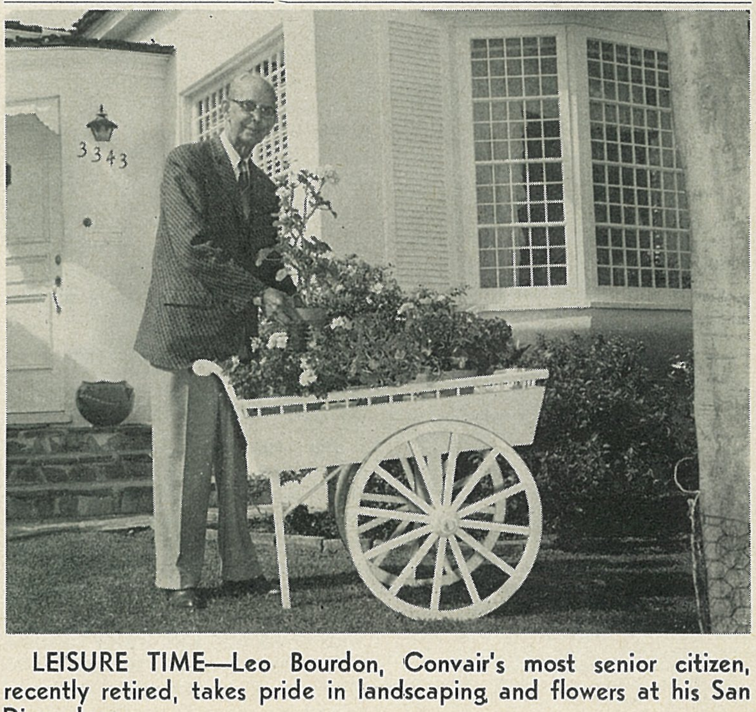
Early in 1917 Kettering organized the Dayton Airplane Co. with three associates—E. A. Deeds (later the head of National Cash Register); Col. Harold E. Talbott, a paper mill and power plant industrialist; and the latter's son and business associate, Harold E. Talbott Jr. (later Secretary of the Air Force). Wright was retained as consultant and the company put up a shop and hangars at South Field, near Dayton.

With additional capital supplied by a Detroit group, the enterprise was reincorporated as the Dayton-Wright Airplane Co. on April 9, three days after the U. S. entered the war.

Dr. J. K. Leverett Given President Citation

Dr. J. K. Leverett of Convair Fort Worth this month was awarded a Presidential Unit Citation and Presidential Unit Citation Ribbon Bar transmitted to him through the commandant of the Eighth Naval District at New Orleans.

The citation came as a result of Dr. Leverett's service with the First Marine Aircraft Wing during the Korean War. Dr. Leverett is Convair Fort Worth's chief physician and head of personnel department's medical section.



LEISURE TIME—Leo Bourdon, Convair's most senior citizen, recently retired, takes pride in landscaping and flowers at his San Diego home.

Free Swimming Set For Mission Plunge

First free Convair SD swim night of the new season at the Mission Beach Plunge has been scheduled for April 4, 7-9:30 p.m.

Monthly family nights will continue throughout the season on the first Saturday of each month, at the plunge which was recently converted from salt to fresh water.

Free tickets are available at employee services, Plants 1 and 2, and can also be obtained by contacting CRA departmental representatives.

Log Book Entries

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective March 16:

Dept. 4-0, Material: To material service asst. supervisor, J. D. Fink.

Dept. 6, Engineering: To sr. electronics group engineer, W. E. L. Boyce, R. Justice. To chief electronics engineer, design and development, E. C. Oertel. To chief electronics engineer, res. and adv. systems, K. Undesser. To asst. research engineer, Y. Tamura.

Dept. 11-0, Contracts: To contract administrator-military, D. L. Illeman.

Dept. 15-3, Customer Service: To service parts adm. asst. supervisor, C. B. Robinson.

Dept. 288-5, Inspection: To inspection asst. supervisor, G. E. Ream.

Dept. 292-7, Manufacturing Control: To M/C asst. foreman, R. C. Solomon.

Retirements

SAN DIEGO

BRAMER—G. T., Dept. 25. Seniority date Dec. 6, 1950, retirement effective March 11, 1959.

BRUCE—J. E., Dept. 123. Seniority date Oct. 2, 1946, retirement effective March 13, 1959.

EVANS—B. H., Dept. 31. Seniority date July 27, 1942, retirement effective March 13, 1959.

HERMAN—Marshal, Dept. 3. Seniority date Nov. 20, 1950, retirement effective Jan. 21, 1959.

HORNUNG—F. J., Dept. 25. Seniority date Feb. 9, 1956, retirement effective March 20, 1959.

KENDRICK—I. H., Dept. 21. Seniority date Aug. 25, 1941, retirement effective March 13, 1959.

OLMSTEAD—C. R., Dept. 25. Seniority date July 21, 1950, retirement effective March 20, 1959.

RUNKLE—Grover, Dept. 102. Seniority date Feb. 5, 1951, retirement effective March 13, 1959.

SMIDT — Henry, Dept. 14. Seniority date July 23, 1948, retirement effective March 16, 1959.

WALTER—E. R., Dept. 14-8. Seniority date Dec. 12, 1951, retirement effective March 20, 1959.

WEAVER—Earl, Dept. 31. Seniority date July 5, 1957, retirement effective March 16, 1959.

ZESBAUGH—P. L., Dept. 603. Seniority date Oct. 10, 1950, retirement effective March 20, 1959.

Personals

SAN DIEGO

Dear friends of Etienne Dormoy: Many, many thanks for your kind sympathy and beautiful flowers in our recent sorrow. "And in passing he left behind him footprints on the sands of time."

Phyllis E. Dormoy
Clare M. Hayden

* * *

We shall always be grateful to the host of Convair friends at both San Diego and Astronautics Divisions for the many kindnesses, beautiful flowers and messages of sympathy when we lost our husband and father, Ted B. Jensen Sr., Dept. 115.

Eileen Jensen—Astro Dept. 500
Ted Jensen—SD Dept. 14-7

* * *

I wish to thank the many Convair associates and personal friends of Fred Orr in Fort Worth, Palmdale and San Diego, who have been so understanding and helpful during my recent bereavement.

Lucille Orr

* * *

To the many Convair friends who sent beautiful flowers and expressions of sympathy at the passing of my husband, Charles L. Wallace, I send heartfelt thanks.

Levon Wallace, Dept. 600-6

Births

SAN DIEGO

HALE—Son, Miles Edward, 7 lbs., 14 oz., born March 12 to Mr. and Mrs. Gene Hale, Dept. 6.

Deaths

SAN DIEGO

ANDREWS—John G., Dept. 292. Killed in highway accident March 21. Survived by wife, Carol.

CATCHING—Capt. David O., AFPR Office. Killed in auto crash March 21. Survived by wife, Doris; two daughters, Shelley and Sherry; brother, sister and parents.

CLARK—Lorrain D., Dept. 230. Killed in plane crash March 21. Survived by daughter, Diana.

COPOLD—Milburn C., Dept. 190. Died March 23. Survived by wife, Freeda; son, Steven; daughter, Justine.

CRAFT—Lawrence J., Dept. 31. Died March 24. Survived by wife, Gladys.

GARCIA — Jose A., Dept. 146. Died March 21. Survived by wife, Margaret.

JENSEN—Ted B. Sr., Dept. 115. Died March 15. Survived by wife, Eileen; son, Ted B. Jr., three daughters, Karen and Nancy Jensen, Mrs. Miriam Accorsi; two sisters, one grandchild.

RICHARDS — Harry V., Dept. 407. Died March 18. Survived by wife, Hilda; two daughters, Jean Summers, Anne Moran; four grandchildren.

SAFTIG—James G., Dept. 230. Died March 26, result of plane crash. Survived by wife, Beatrice.

Camera Club Seeks Models For Photorama

Camera Club members at Convair SD this month are in the market for models.

The club needs two glamour models and two character models to represent it at the San Diego Photorama May 3 and is now in the midst of a plant-wide search.

All Convair SD girls are eligible. C. E. Schultz, CRA commissioner, explained that character models could include jugglers, dancers, acrobats or anyone with a talent of visual interest.

Girls interested should contact Al Bennett, ext. 1106, or Ron Ainsworth, ext. 2363, both Plant 1.

In other Camera Club business, members last month laid the groundwork for a San Diego slide show as a club project. Hopes that non-members would take an interest in the slide show were expressed by club officials.

The next quarterly contest to be held the second meeting in May will be limited to photojournalistic shots of the SD area.

Meeting schedule for this month includes a model shoot at the Astro cafeteria on April 13, and movies on the manufacture of precision lenses at the April 27 session in the Photo Arts Bldg.

Garden Club Plans Rose Show April 19

Members of the Convair SD Garden Club will hold an important meeting April 8, 7:30 p.m. in the Floral Association Bldg., Balboa Park, to lay final plans for the annual Convair Rose Show, April 19.

Hours for the show have already been decided and doors of the Floral Association Bldg. will be thrown open to the general public from 1-6 p.m. The Rose Show is the second largest affair staged by the Garden Club during the year.

Program for the April 8 meeting will be the showing of Everett Henderson's film on dahlia planting and care and shots of all Southern California dahlia shows held in 1958.

Two days still remain for flower lovers to obtain tickets for the annual SD County Orchid Show to be held April 4-5 at the Balboa Park Conference Bldg. Tickets are available at employee services, Plants 1 and 2.

New Team Selected By SD Pistol Club

Selection of a new Convair SD Pistol Club team, based on high aggregate scores during the past three months, was announced last week.

Team members are B. L. Broadway (Dept. 603), Joe Williamson (Dept. 401), Jim Halfacre (Dept. 180), and Ralph Picard (Dept. 31).

Broadway took master class honors in a shoot March 22, followed by runner-up Ray Groth (Dept. 25). R. D. Miller (Dept. 600) and Carl Hornburg (Dept. 166) placed one-two in the expert class while sharpshooter laurels went to Dorcas Utter (wife of Arley Utter, Dept. 129) and Dale Young (Dept. 21).

R. G. Lair (Dept. 406) placed first in the marksman category. Joe Williamson won the short national event with a score of 271.

Fishing Competition Opens Today at SD

The annual monthly fishing contest at Convair SD opens today (April 1) and will continue throughout the summer, Dale Cromartie, Fishing Club commissioner, announced last week.

Fifty dollars in gift certificates will be awarded each month for both fresh and salt water catches. Prizes are awarded through fifth place and rankings are determined by ratio to record catches.



FINALE—Manufacturing Control (Dept. 292) swept both halves of shop league basketball at Convair SD, last week, knocking off Flite Test (Dept. 6) 40-30 in final game of season to cinch undisputed first place. Harry Van Buren, team captain, signs in Manufacturing Control players before game. From left: Ken Smith, Jack Lundstrom, Les Phillips, Lee Reynolds, John Cassell, Dick Fenton, Bill Murphy and Nick Ferguson.

SD Hoopsters Finish Season; 292 Wins Shop League Playoff

Hoopsters at Convair SD flipped their final shots last month, ending a successful basketball season that included a first and second place in outside competition and crowning of a new plant champion.

First and foremost was the Tool Manufacturing entry in the Industrial "A" league which finished the regular season with an unblemished record of 10 wins against no defeats.

The Convair SD girls' team placed a highly respectable second in city competition after losing a first place play-off game with T.O.T.s, 47-41. In the Navy Invitational, the local entry scored two victories before bowing out of the tourney after losing to NTC, 42-35.

In shop league competition, Flite Test (Dept. 6) and Manufacturing Control (Dept. 292) tied for the second half lead with identical records of won four and lost one. Tool Manufacturing won the play-off game 40-30. Tool Manufacturing also came out on top, 69-50, in an inter-division contest with Convair Pomona's shop league winner.

Dept. 6 Electrical finished third in the shop league with a record of three victories and two defeats. Placing fourth, fifth and sixth, respectively, were 880 Wing, 603 Tooling and Plant Engineering.

Art Club Classes, Meeting Scheduled

Members of the Convair SD Art Club will meet tomorrow (April 2) at 8 p.m. in the Spanish Village, Balboa Park, to discuss activities and shows for the new season.

Any Convair folk interested are invited to attend the meeting as well as the drawing classes now being held every Tuesday starting at 7 p.m. at the Balboa Park location.

Class reservations, however, should be made ahead of time by contacting Gil Crosthwaite, ext. 1245, Plant 1, after 1 p.m. Through CRA arrangements, drawing materials are furnished at cut-rate prices.

Deductions to Bank For Savings Only

In clarification of the new in-plant banking services offered at Convair San Diego and Astronautics, payroll deductions are made for industrial allotment accounts—savings accounts only. No deductions are made through the company for checking accounts at SD or Astro.

New Classes Start For Square Dancers

A new series of beginners' square dancing classes will start April 6, 8 p.m. at the American Legion Hall, 4061 Fairmount Ave.

P. E. Liggett, CRA commissioner, said the classes will be held open for registration for approximately three weeks. Taught by Dorothy van der Walker, the classes are held each Monday for 14 weeks, then progress into the intermediate stage. A fee of 50c is charged for each session.

On April 10 the Convair SD Hoedowners will journey by bus to El Centro for dinner and an evening of dancing.

SPEARFISHING MEET

Delta Divers from Convair SD will journey to Cardiff this Sunday (April 5) for a spearfishing meet from 9-12 a.m. The top three winners will be awarded prizes and points will be counted toward the Diver of the Year award.



MILESTONE—R. R. Biddle, Dept. 25, receives congratulations from H. A. Smith, chief plant engineer, on occasion of 25th anniversary with Convair. Left to right: B. F. Coggan, SD manager; Vern Sharp, asst. chief plant engineer; Smith; E. R. Fink, maintenance foreman; Biddle; J. W. Vint, supt. of maintenance; J. N. Strong, maintenance foreman.

Turnout Large For Badminton

San Diego and Astronautics badminton players joined March 14 for one of the largest tournaments ever held under CRA sponsorship. Some 40 players participated in the Federal Building event.

Jim Poole (SD) downed Dick Mitchell (Astro), 15-8, 18-17 in the "A" men's singles. Joe Seewerker (SD) won by default over Al Pfenninghausen (Astro) in the "B" singles, while Ray Justice (SD) topped Les Marr (Astro) by 6-15, 15-2, 15-3 in the "C" singles.

Men's doubles honors went to Bill Johnstone and Dennis Sealey (SD) over Poole and Tom Richardson (SD) by 15-10, 15-1. Mixed doubles found John Leib (Astro) and Carol Minter (SD) topping Dick and Evelyn Mitchell, 15-1, 15-12.

Miss Minter won the "A" ladies' singles in an 11-8, 11-1 set with Florence Carlson (Astro). Mrs. Mitchell and Florence Carlson won the fems' doubles with a 15-13, 15-14 win over Miss Minter and Charlotte Munson (Astro).

Consolation winners included: Katie Marr (Astro) over Jane Williams (Astro); Alan Van Norman (SD) and Les Marr over Pfenninghausen and Andre Malabanan (Astro); and Les and Katie Marr over Ray and Judy Justice (SD).

Sunday Coin Club Meeting Planned

The Convair SD Coin Club has decided to schedule an extra meeting, especially for the benefit of second-shift people, April 12 at the Gillespie Field Clubhouse starting at 7:30 p.m.

If enough interest is shown meetings will be held the second Sunday of each month at the CRA location. Gil Crosthwaite, commissioner, said the Sunday session will be in addition to the club's regular meeting night on the fourth Wednesday of the month.

FIRST WATER SKI MEETING APRIL 8

A potluck supper and business meeting will launch the new season of the Convair SD Water Ski Club April 8, 6 p.m., in the Old Town Chamber of Commerce Hall on Mason Street.

T. E. Mathews, commissioner, urged both members and those interested in joining the club to attend. Items on the agenda include organization, program planning and a membership drive.

Matthews said emphasis would be placed on a detailed program for the summer activities and responsibilities and benefits incurred in the $5 family registration fee.

Mathews asked those interested to contact Joan Roberts, ext. 637, Plant 1, for menu contributions for the potluck supper which will precede the business meeting. Door prizes will be awarded and ski instruction booklets passed out to new members.

PLANT VOLLEYBALL PLAY GOES INTO NEXT ROUNDS

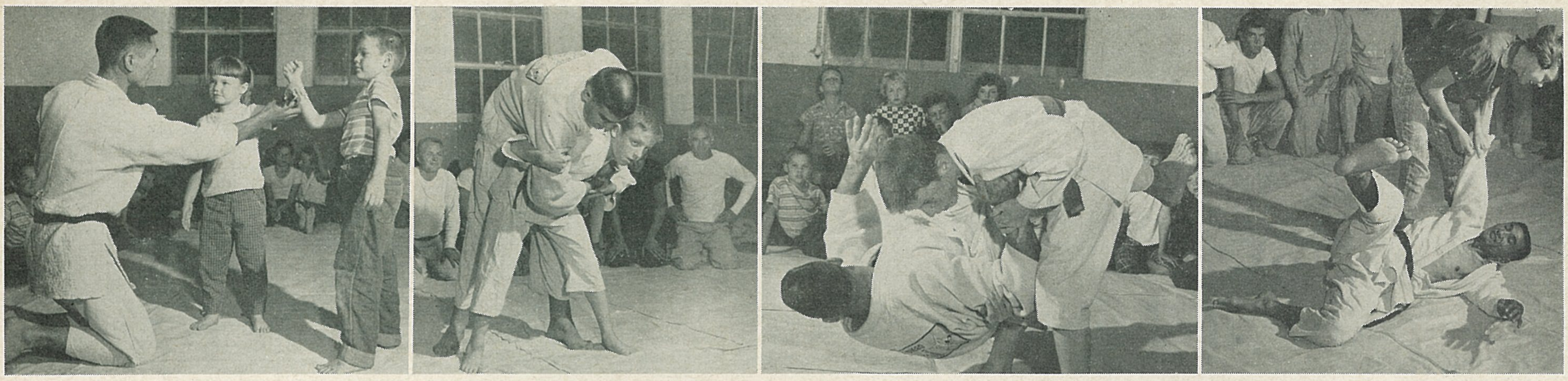
Shop league volleyball at Convair SD swings into its second and third rounds during the next two weeks with eight games on tap in two leagues.

Girl Doubles Score To Set Keg Record

Terry Slawson last month forgot all about the 110-average she carries in the Convair Whirlaway 750 bowling league.

It escaped her mind so completely that Terry (daughter of Jackie Schmidt, Dept. 149) toppled enough pins to register a new individual women's high game in the league.

She more than doubled her average, tallying a 240 game!



UP, UP AND OVER—Judo instruction is latest fad at Convair San Diego with upwards of 40 persons on hand for each session Wednesdays and Thursdays. At left, Freddy Osborn (son of Melvin Osborn, Dept. 6) and Kandy Mullins (daughter of Moon Mullins, Dept. 280) get instruction on proper hold. At right, Clara Planchon, 14 (daughter of Carl Planchon, Dept. 603-6), flips instructor, Mamoru Masaki (Dept. 6). In center sequence, Norman Jones (son of K. Jones, Dept. 6) throws tutor, Gene Mauro (Dept. 280), to canvas. Classes are now being held at Gillespie Gym, El Cajon.

CRA Sports & Recreation Convairiety

Tryout, Meeting Planned For New Softball Season

Tryouts for the Convair SD AAA softball team, defending title-holder of the county, will be held tomorrow (April 2), starting at 7 p.m. at Golden Hill Playground.

Two teams will most likely be entered in city competition, Gil Crosthwaite, commissioner, said last week. One will definitely be in the AAA league and another in a league yet to be decided.

Final records of last year's Convair softball teams included AAA champ and victories in the pre-season tourney as well as the La Mesa Invitational.

Shop league softball will also start soon. An organizational meeting for team representatives of SD departments is scheduled for April 16, 5 p.m. in the CRA Clubhouse.

Last year in shop league play 18 teams in three leagues battled to decide the plant champion—eventually won by Manufacturing Control after a close play-off with Dept. 6.

Clubs Produce 28 Keg Teams

Twenty-eight teams, 19 from Convair SD and nine from Astronautics, took part in a Convair Management Club telegraphic bowling tournament March 8 at Tower Bowl.

High scratch team honors went to a Dept. 31 team from San Diego Division with a 2,629 total. Team captain was J. Hammer.

High handicap series was won by the Astro Five with a 2,929 total. Frank Budz was team captain. Team members included Bill Geopfarth, J. Moore, Morrie Baxter and Forrest Erwin.

High individual series was copped by Dale Mansfield of San Diego, while Frank Budz of Astro took high individual handicap series with a 662. Mansfield also shot a scratch 233 game while H. L. Williams of Astro turned in a handicapped 256.

LUCK SHOOT SET FOR SD ARCHERS

The CRA Archery Club at Convair SD, along with seven other member-clubs of the Southern Border Archery Association, will sponsor an "April Fool" shoot April 5 at the Rohr Range in Bonita.

Registration for the event starts at 8:30 a.m., but late-comers can still sign up until shortly after noon.

A percentage system of scoring will give the novice as good a chance as the expert to win one of the fifteen prize hams. Registration fee for the shoot is $1.50.

* * *

At a business meeting last month a new slate of officers was elected by the club. New president, succeeding Al Phipps, is Bob English of Rose Canyon. Other officers include Bud Bence (Dept. 31), vice president; Mrs. John Smith (wife of John Smith, Dept. 603), secretary-treasurer. John Smith is the new field captain and Jim Bence (son of Bud Bence), target captain.

Gun Club Events Set by SD, Astro

Next shoot staged jointly by the Convair SD and Astronautics Gun Clubs at Gillespie Field will start at 9 a.m. on April 5.

On April 14 the clubs will hold a joint meeting starting at 7:30 p.m., also at Gillespie. C. W. "Red" Pharis, Convair skeet champion, will demonstrate his specialty in addition to a movie and report on hunting. Any Convair folk interested are invited to attend.

80 Attend Judo Classes Weekly Offered by CRA

The manly art of self-defense, taught under sponsorship of CRA at Convair SD, is attracting upwards of 40 participants per meeting, Pete Beyrer, commissioner, reported last week.

He said the judo courses are proving particularly popular with the younger set but added that plenty of adults, too, are taking advantage of the twice-weekly sessions (Wednesdays and Thursdays, starting 7 p.m. in Gillespie Gym, El Cajon).

Experienced instructors include M. Masaki (Dept. 6), Gene Mauro (Dept. 280) and E. Morrell (Dept. 6). All phases of the art—weight balance, various holds, the right way to fall—are taught with instruction especially aimed at the novice student.

A 25c fee is charged for each lesson. Although students are not required to wear judo uniforms, gym-style clothing is recommended.

All Convair SD employees and dependents over five years of age are eligible to join. Membership cards (50c for adults, 25c for children) are available at the classes.

Students Pass FCC Exams; SD Hams Get New Equipment

A large percentage of beginners enrolled in the code and theory classes sponsored by the Convair SD Radio Club successfully passed their FCC novice exams, J. B. Baker, club commissioner, said last week.

Classes will continue Tuesdays and Thursdays at 6:30 p.m. for those interested in passing the "general" and "technician" tests at the club headquarters on Harbor Drive.

The beginners' graduation followed on the heels of a "booster" program recently completed by the group.

New equipment obtained by the club brought the local ham station up to date, Baker said. Facilities now include a single sideband, CW and AM phone on 80 through 10 meters, and communications equipment for six and two meters. The new radio transmitter is rated for the maximum legal input power of one kw.

Also in use are two rotating, directional-beam antennas, a phone patch network, electronic test instruments, workbench areas and an adjoining lecture room "rigged" for multiple-key practice sessions.

Call letters of the station are K6DBS. Additional information can be obtained by contacting Baker, ext. 491 or 2568, both Plant 1.

Snow Skiers Set Mammoth Outing

Snow skiers from Convair SD are planning one of their final outings of the season to Mammoth Mountain April 11-12.

The group will hold its annual club races with three separate events at the California resort. All participants in the races must be members of the Far West Ski Association, Joe Harris, CRA commissioner, said.

Skiers from Astronautics will also be on hand for the event, Harris added. Entries for the Sunday races will be taken as late as the evening of April 11 at the ski site. For additional information and to place entries contact Joan Brennan, AT-3-2977 or Harris, AT-4-0287.

'HUNTER' COURSE STARTS SATURDAY

Next course on hunter safety requirements, taught by R. J. Tarver, certified NRA instructor, will start this Saturday (April 4) at 10 a.m. at the Gillespie Field Gun Club location.

The course, sponsored by CRA at Convair SD, is required by California state law for all persons under 16 before they will be issued hunting licenses. If possible, students are asked to furnish their own guns although a limited number of club rifles is available.

To eliminate any confusion on the subject, Tarver said the course is open to girls as well as boys and extended a special invitation to gal gun enthusiasts.

Instruction runs for three consecutive Saturdays for a total of eight hours. Registration can be made at employee services, Plants 1 and 2, or by just signing up for the first class this Saturday.

CHORALAIRES PLAN CHURCH APPEARANCE

Next appearance of the Convair SD Choralaires will be a concert at 8 p.m., April 10, at the First Methodist Church in Escondido, W. A. Vogel, director, said last week.



HERE'S HOW—Part of crowd taking advantage of CRA Judo instruction at Convair SD watch demonstration by instructors, Gene Mauro and Mamoru Masaki, both holders of belts of high rank.

CRA Calendar

(In view of the fact that Convairiety now carries the complete CRA calendar only at intervals, it is suggested that readers may desire to clip for future reference.)

★ ★ ★

AEROMODELERS — Call CRA headquarters, ext. 1245, Plant 1. Meet Sunday mornings, 8:30 a.m., Clairemont-Mesa field.

ARCHERY—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. Club meets third Thursday of each month, 7:30 p.m., CRA Clubhouse. Workshop in clubhouse open each Tuesday and Thursday, 7-9 p.m. Monthly shoots on second Sunday of each month.

ART CLUB—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. Club meets by notice only.

ASTRONOMY—Keith Sears, commissioner, ext. 2900, Plant 1. Club meets first and third Fridays, 8 p.m. at CRA Recreation Area, Gillespie Field, El Cajon.

BADMINTON—Tom Richardson, commissioner, ext. 2780, Plant 1. Organized play and instruction Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park. Open play for Convair employees and their families each day.

BALLROOM DANCING — Martha Woodberry, commissioner. Call ext. 1245, Plant 1, for information. Grace McGrath, BE-4-8686. Grace McGrath Dance Studio, 1322 Fifth Avenue.

BASEBALL—Pete Beyrer, commissioner, ext. 1245, Plant 1.

BASKETBALL—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. (GIRLS' TEAM: Call Jean Todd, ext. 1017, Plant 1.) All teams play at Muni Gym, Balboa Park.

BOWLING—Jim Hayman, ext. 1155, Plant 1; Mike Brooks, ext. 720, Plant 2, commissioners.

BRIDGE CLUB—Pete Beyrer, commissioner, ext. 1245, Plant 1. For information call Frank Westphal, ext. 2225, Plant 1. Meetings first and third Tuesdays, 7:30 p.m., at Hotel Barcelona, 326 Juniper St.

CAMERA CLUB—C. E. Schultz, commissioner, ext. 289, Plant 2. Regular meetings second and fourth Mondays, 7:30 p.m., Photo Arts Bldg., Balboa Park. Darkroom in CRA Clubhouse available to club members.

CHESS CLUB—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. Club meets each Wednesday, 7:30 p.m., CRA Clubhouse. Sets available for lunch period games.

CHORAL CLUB—Martha Woodberry, commissioner, ext. 1245, Plant 1. W. A. Vogel, director. Rehearsals each Monday, 7:30 p.m., CRA Clubhouse.

COIN CLUB—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. For information call Joe Miller, ext. 2373, Plant 1.

DELTA DIVERS — Tom Richardson, commissioner, ext. 2780, Plant 1. Meet fourth Tuesday of each month, 7:30 p.m., Natural History Museum, Balboa Park.

FISHING — Dale Cromartie, commissioner, ext. 1650, Plant 1. Club meets third Tuesday of each month, 7:30 p.m., Conference Bldg., Balboa Park. Boat Building, E. R. Fink, chairman, ext. 1144, Plant 1.

GARDEN CLUB—E. L. Zimmerman, commissioner, ext. 2120, Plant 1. Club meets second Wednesday of each month, 7:30 p.m., Floral Assoc. Bldg., Balboa Park.

GLIDER CLUB—Call CRA headquarters, ext. 1245, Plant 1. Meetings by notice only.

GOLF—Ken Wulfemeyer, commissioner, ext. 1705, Plant 1. Convair Golf Club, call Harold Purnell, ext. 1313, Astronautics.

GUN CLUB—Jack Swank, ext. 1161, Plant 1; Gene Horstman, ext. 753, Plant 2, commissioners. Club meets second Tuesday of each month, 7 p.m., Natural History Museum, Balboa Park. Club shoot, rifle, trap and skeet, first Sunday of each month at CRA range overlooking Gillespie Field, El Cajon. Open shooting each Sunday.

HORSESHOES—Kurt Klein, commissioner, ext. 507, Plant 2.

ICE SKATING—Bud Davies, commissioner, ext. 649, Plant 1. Skating sessions for Convair employees and their families each Thursday at Sonald Ice Skating Studio, 3464 Midway Drive; Juniors 6:30 to 8, adults 8 to 10 p.m. For instruction information, call AC-2-4467.

JEEP CLUB—Seasonal outings only. For information call Gil Crosthwaite, ext. 1245, Plant 1.

JUDO — Pete Beyrer, commissioner, ext. 1245, Plant 1. Instruction each Wednesday and Thursday, 7 to 8:30 p.m., Gillespie Gym in El Cajon.

MODEL RAILROAD — Bud Davies, commissioner, ext. 649, Plant 1. Meetings each Friday at 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced-price movies each Friday night at Academy Theater, 3271 University Ave. Adults, 25c; children, 10c.

PISTOL CLUB—Ash Bishop, commissioner, ext. 1413, Plant 1. Home phone, HU-8-3460. Club shoots second and fourth Sundays of each month at 9 a.m., San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB—J. B. Baker, commissioner, ext. 491, Plant 1. Club meets Thursday after issue of **Convairiety**, 7:30 p.m., at Radio Club Headquarters, Harbor Drive.

RIDING CLUB—Marc Beresford, commissioner, ext. 1660, Plant 1. C. L. Pogorel, co-commissioner, ext. 691, Plant 2.

ROCKHOUNDS—Dan Whorton, commissioner, ext. 777, Plant 1. Lapidary classes Mondays, Tuesdays and Wednesdays, 7-9 p.m., Rockhound Shanty. Classes for second shift, Tuesdays, 12:30-2:30 p.m. Regular meetings second Thursday of each month, 8 p.m., Natural History Museum, Balboa Park.

ROLLER SKATING — Convair skate night third Monday each month. Free tickets at employee services offices. Saturday matinees each week, 2-4:30 p.m. Skateland, Front and G. Admission 25c per person for Convair employees and their families. Admittance by club membership card. Cards available at employee services, both plants.

SKI CLUB—Joe Harris, commissioner, phone AT-4-0278 evenings. Meetings first and third Tuesdays, Natural History Museum, Balboa Park. 8 p.m.

SOFTBALL — Tony Berardini, ext. 2910, Plant 1; Gil Crosthwaite, ext. 1245, Plant 1, commissioners.

SOLO FLYERS—Call CRA headquarters, ext. 1245, Plant 1. Meet each Monday and Wednesday, 7:30 p.m., at Jim's Aircraft hangar on Lindbergh Field plane ramp.

SPECIAL EVENTS and COMMISSIONERS-AT-LARGE—Eddie Robinson, ext. 296; Paul Pearson, ext. 345, both Plant 2; Jerry Schultz, Palmdale.

SPORTS CAR CLUB—Gerry Wright, commissioner, ext. 1130, Plant 1.

SQUARE DANCING—P. E. Liggett, commissioner. Call ext. 1245, Plant 1, for information. Beginners and intermediate classes Mondays, 8 p.m., American Legion Hall, 4061 Fairmount Ave. Advanced classes Tuesdays, 7:30 p.m.; party night, fourth Saturday of month, 8 p.m., both at University Heights Community Center, 4044 Idaho St.

STAMP CLUB—Jack Benedict, commissioner, ext. 507, Plant 2. Club meets first Thursday of each month, 7:30 p.m., Conference Bldg., Balboa Park.

SWIMMING — Pete Beyrer, commissioner, ext. 1245, Plant 1. Family swim night first Saturday of each month, 7-9:30 p.m., at Mission Beach Plunge.

TABLE TENNIS—Pete Beyrer, commissioner, ext. 1245, Plant 1.

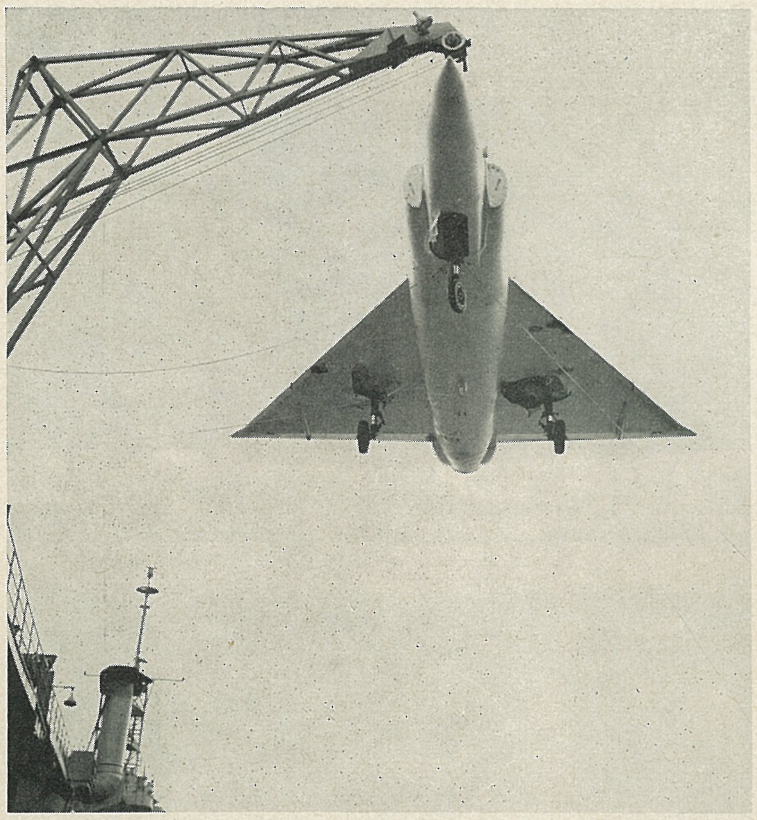
TENNIS—Gil Crosthwaite, ext. 1245, Plant 1.

TROPICAL FISH—Pete Beyrer, commissioner, ext. 1245, Plant 1. Club meets second Tuesday each month, 7:30 p.m., CRA Clubhouse. Workshop every Tuesday and Thursday, 7 p.m.

VOLLEYBALL—Pete Beyrer, commissioner, ext. 1245, Plant 1.

WATER SKI CLUB—T. E. Mathews, commissioner, ext. 1117, Plant 1.

WOMEN'S ACTIVITIES — Martha Woodberry, commissioner, ext. 1245, Plant 1.



FLOATING?—Camera angle gives impression that cocooned F-102 is floating like a blimp with nose attached to crane. Actually, it is swinging from sling. Planes were unloaded from aircraft carrier recently at Naha, Okinawa, after trans-Pacific crossing.

F-102A SQUADRONS WIN SAFETY HONOR FOR FLYING RECORDS

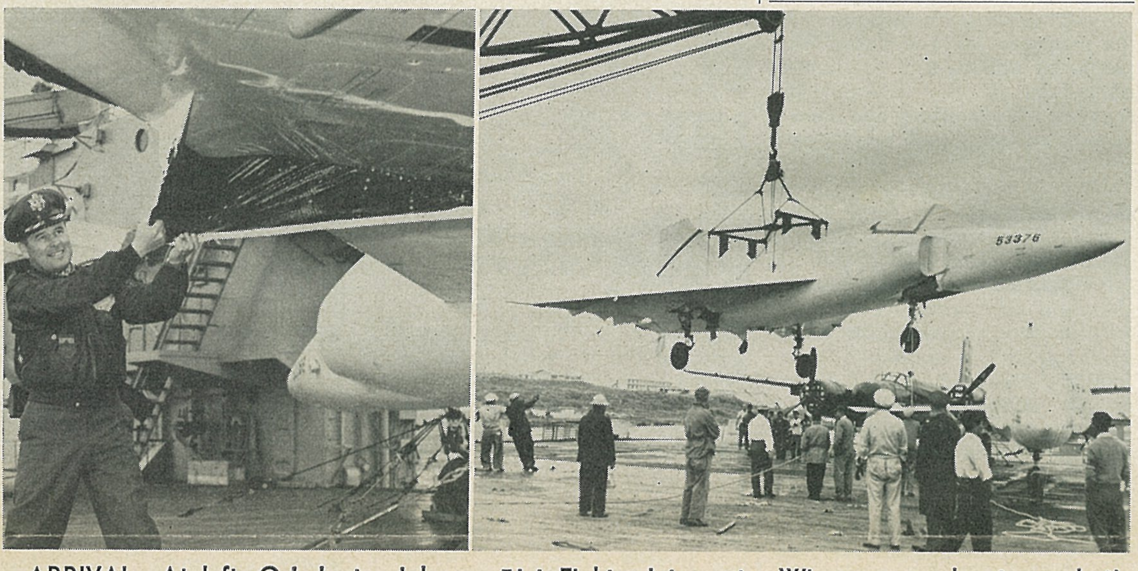
Two F-102A squadrons have received recognition for safe flying records.

Geiger Field's 498th Fighter-Interceptor Squadron at Spokane, Wash., was nominated in February for the Air Defense Command flight safety certificate of meritorious achievement.

The F-102 equipped FIS completed an entire year of flying without suffering an accident. The unit flew 6,660 hours without accidents from January, 1958, through January, 1959, Lt. Col. F. D. Willis, squadron commander, announced.

Last accident charged to the 498th occurred early in January, 1958, while the squadron was deployed for missile firing practice at Tyndall AFB, Fla.

The 482nd FIS at Seymour Johnson AFB, Goldsboro, N. C., was presented a plaque for accident-free operations from October, 1957, to October, 1958. According to base officials, the 482nd, commanded by Lt. Col. James Thomas, has not had an accident since then.



ARRIVAL—At left, Col. Lester Johnsen, 51st Fighter Interceptor Wing commander, tears plastic protection skin for better look at F-102 on arrival of new ships at Okinawa. Delta interceptors will join defense of Ryukyu Islands. At right, first plane leaves carrier deck.—USAF photos.

Five Convair Persons Killed In Auto, Light Plane Accidents

A tragic weekend saw four Convair people and an AF officer assigned to Convair fatally injured in light plane crashes and auto accidents.



James Saftig

Lorrain Clark of Convair SD Dept. 230 was fatally burned in a crash of a light plane near Camp Pendleton March 21. Mrs. Clark has been with Convair for nine years.

Pilot of the plane, James Saftig, SD Dept. 230 supervisor, was hospitalized with severe burns in the same crash. He died last week.

CRA commissioner of Aeromodelers, Solo Flyers, and the Glider Club, Saftig recently was elected president of the CRA Council at Convair SD.

Saftig was nationally and internationally known in airplane modeling circles. He is survived by his wife, Beatrice.

In another light plane crash the next day, on Highway 80 near Pine Valley, George Harding, Convair Astronautics Dept. 454, was killed.

John G. Andrews of Convair SD Dept. 292 was fatally injured when struck by a car as he walked across Highway 101 in Solana Beach.

Capt. David Otis Catching, AF officer stationed at Convair SD, was killed in an auto accident on Highway 395 on Saturday evening. A B-24 pilot in World War II, Catching had been assigned to Convair in the fall of 1954 from Kelly AFB, San Antonio, Texas. He was chief of the production unit in the AF plant representative's office.

Col. Stapp to Talk For Rocket Society

Col. John Paul Stapp, known as the "fastest man on earth" because of tests he made aboard a 632 mph rocket-propelled sled in 1954, will speak at North Texas Section meeting of the American Rocket Society April 18.

"Space Medicine" will be Colonel Stapp's topic at the meeting scheduled for Western Hills Inn on Highway 183.

Colonel Stapp, the society's national president, is now chief of the aero medical lab, Wright Air Development Center at Wright-Patterson AFB.

Convair Man Chosen For Guard Ceremony

Carlton J. Shepard of Convair SD Dept. 6 will represent California and the 251st AAA Group at dedication ceremonies of the National Guard Memorial Building May 3 in Washington, D. C.

A specialist second class in the California Army National Guard, Shepard will join representatives of other state national guard units selected to take part in a parade of flags.

M. C. COPOLD DIES SUDDENLY AT SD

M. C. Copold, Convair SD manufacturing specialist, died suddenly in a San Diego hospital March 23.

Copold, who joined Convair at Fort Worth in 1948, had headed up SD Division's numerical control activities since they were first inaugurated.



M. C. Copold

Coming to SD engineering department in 1952, he had been supervisor and then chief of manufacturing development before being named coordinator of numerical control Sept., 1957. He was appointed manufacturing specialist the fall of 1958.

At Fort Worth he was a senior design engineer working on the B-36, YB-60, and preliminary design of the B-58.

A native of New Jersey, he attended New York and Rutgers Universities and had worked for General Motors Corp., Fairchild Aircraft Corp., and North American Aviation before joining Convair.

He was first chairman of Aircraft Industries Association national committee on numerical control, instructor of numerical control classes in the U. of California Extension program, and held many patents outside of Convair on his developments.

He is survived by his wife, Freeda; and two children, Justine and Steven.

15,000-Mile, Two-Way, Wire System Connects All Dynamics Divisions

All divisions of General Dynamics Corporation are now interconnected with a 15,000-mile Western Union wire system providing instantaneous two-way communications between 62 plants and offices across the continent.

In formal inauguration ceremonies last week at General Dynamics' headquarters in New York City, Earl D. Johnson, executive vice president, sent the first official message including the statement, "Fast, accurate communications play an important part in the operation of our business, and these facilities represent another step forward for General Dynamics."

Allen D. Marshall, General Dynamics vice president, under whose supervision the system was inaugurated, said, "The private wire system we are leasing from Western Union will permit us to exchange information immediately and constantly among all points in our organization."

Convair President J. V. Naish observed that "the new system will provide improved communications not only between our General Offices and Corporation headquarters in New York, but also between Convair offices and plants from coast-to-coast."

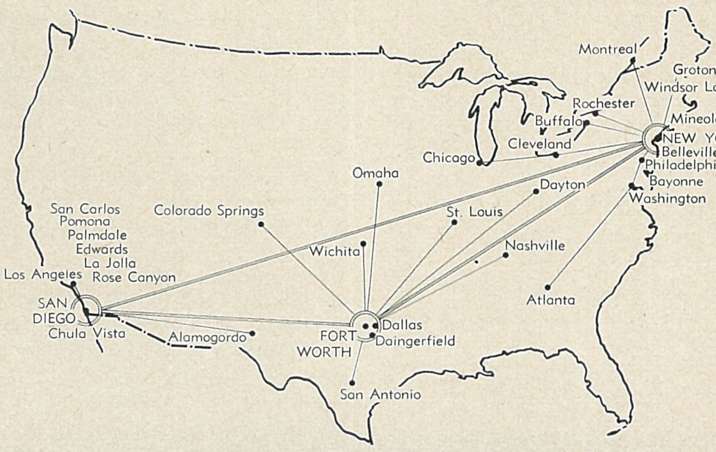
Messages are punched on perforated tape by operators at originating points and transmitted automatically by push-button selection to the desired destinations.

Each message passing through the switching centers is automatically numbered in sequence, providing a running record of all communications transmitted.

A priority arrangement permits instant transmission of urgent messages.

Three message centers in New York, San Diego, and Fort Worth are connected directly with Western Union's national and international public message network, enabling all General Dynamics' offices to transmit telegrams to other companies and persons.

Major General Dynamics centers linked by the system are Convair's San Diego and Astronautics Divisions and Stromberg-Carlson facilities in San Diego, Calif.; Convair Pomona; Convair Fort Worth and Daingerfield; Canadair Limited in Montreal, Canada; Electric Boat Division in Connecticut; Stromberg-Carlson's headquarters at Rochester, N. Y.; Liquid Carbonic in Chicago, Ill.; and Electro Dynamic in New Jersey.





OPENING DAY—New communication network, linking General Dynamics Divisions and facilities with each other as well as key points across U.S., went into operation late last month. At far right, Walter P. Marshall, president of Western Union, gives pointers on equipment to Earl D. Johnson, General Dynamics executive vice president. Photo at far left, taken at Convair Fort Worth, shows Betty Szedeli, Veta McClure and John Howell examining tape. In center is communications headquarters at San Diego with Yvonne Winn, Bee Levenson, Fern McMahon and Merle Fullerton working machines.

'Early Bird' Ideas Score In Reduce Xpense Drive

Of the first four RX ideas submitted, two already have been put into effect and a third will go into effect very soon.

No. 1 to be acted upon was submitted by R. E. Hart, Dept. 192-2 assistant foreman, who recommended elimination of bottled water coolers in all areas where regular drinking fountains are readily accessible.

"Let's do it!" was the penciled comment of B. F. Coggan, SD Division manager, to whom the RX idea was submitted. (In fact, he telephoned plant engineering at the same time, to add speed!)

Preliminary investigation indicated the move would result in a saving of several thousand dollars, as well as eliminate a safety hazard that exists when the heavy bottles are being replaced.

No. 2 idea to go into effect was submitted by Ethel McCann, clerk in Dept. 190-1, who suggested eliminating window envelopes for flat salary checks. Effective April 3, Coggan ordered their discontinuance, at a cost saving of several hundred dollars a year. (She will receive an ES award in addition to being considered in the RX campaign.)

An idea sent in by R. E. Crowder, Dept. 136 assistant foreman, one of the first four received, was approved last week and will be put into effect rapidly. His RX suggestion was to have a "standard repair procedure" established for cases where the shop needs to drill a huck bolt hole oversize, thus eliminating the need for an IR (inspection rejection).

"Sounds sensible . . ." was Coggan's personal comment. Cost analysts checked with engineering and the report was favorable. No immediate estimate of savings was available but it is expected to be considerable.

The fourth idea came from J. W. Hammond, Dept. 180 assistant foreman, who suggested wider use of embedded metal identification discs for small tools, eliminating metal tags that sometimes are lost or must be removed in order to use the tool.

Coggan's comment, in part, was, "Warrants serious consideration . . ." Cost analysts went into action and a careful study indicated that although the idea had merit, the system is already in use to a sufficient degree.

(See "RX" procedure below for details on submitting ideas.)



HOME FIRST—First four RX ideas were sent in by, left to right, J. W. Hammond, R. E. Hart, R. E. Crowder, Ethel McCann. Three of their ideas received quick approval.

C-V CONVAIR

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Convair Division of General Dynamics Corporation.

Convairiety

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Wednesday, April 15, 1959

San Diego EDITION

(Serving San Diego Division of Convair)

SD Division news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.

Danny Whorton Named SD's President of CRA

Danny Whorton, a 23-year veteran with Convair, last week was unanimously elected on the first ballot and installed as president of the Convair SD Recreation Association Employees' Council.

He assumes duties of the office vacated by the death of James Saftig, the president-elect, who was fatally injured last month in a light airplane crash.

Council members, led by J. K. Field, SD chief of employee services, paused in silent prayer in honor of Saftig's memory before starting the business meeting.

Other Council officers, previously elected, were installed at the meeting. They are Marc Beresford, vice president; Ken Wulfemeyer, treasurer; and Grayce Fath, secretary.

Whorton has been a CRA Council member since 1952, and served as treasurer (1956-57) and vice president (1957-58). Well known as commissioner of the Convair SD Rockhounds, Whorton is a charter member of that group, formed in 1948, and was active in equipping and setting up the Rockhound Clubhouse on Pacific Highway.

The new president has spent all his Convair service in San Diego, with the exception of two years, 1943-45, in New Orleans. His principal interest, outside of rockhound activities, is amateur wrestling. Active in this sport since school days he has officiated frequently.



Danny Whorton

Field presented the outgoing prexy of the Council, Tony Berardini, with a rosewood gavel in appreciation of the performance of his presidential duties during the past two years.

Field said the two years with Berardini at the helm of the Council were marked by definite progress for the Convair Recreation Association, citing the acquisition and expansion of both Pecan Park and Gillespie Field as examples.



ON DISPLAY—Convair SD's second 880 jet transport to fly, plane No. 3, is at Las Vegas, Nev., this week on public display at World Congress of Flight. It will make a fly-by demonstration. Plane No. 1 is going through AF demonstration flights at Edwards AFB.

Hospital Fund Drive Ahead For SD, Astro

Convair San Diego and Convair Astronautics will participate in the "Crusade for Life" fund-raising campaign to provide vital expansion for the San Diego area's three major hospitals.

Convair will conduct an in-plant drive this summer, as will virtually all other industrial concerns in the city, J. V. Naish, Convair president, and member of the executive committee of the Tri-Hospital Association, announced.

"Only a desperate community situation would persuade me to permit a campaign over and beyond our regular Con-Trib-Club solicitations," Naish explained. "However, this is a condition of such vital concern to all of us that we must do our utmost to correct it."

"Crusade for Life" concerns three privately endowed and operated, non-profit hospitals, Mercy Hospital, Donald N. Sharp Memorial Community Hospital and Scripps Memorial Hospital.

Combined, they now have 714 beds. The "Crusade for Life" campaign aims at raising $10½ million for 417 additional beds and to remodel and reconstruct Mercy so that its present 325 beds will not be lost to the public through cancellation of Mercy's accreditation by the State Department of Hospitals.

"The problem is simply that San Diego population has far out-stripped its hospital facilities. These three hospitals were forced to turn away more than 2,000 patients last year solely because they did not have rooms. Some of these patients undoubtedly were Convair people," Naish continued.

Mercy, Sharp and Scripps are non-profit. They actually operate at a deficit. It costs more to run them than they take in. They are maintained largely through the generosity of a few individuals or the active work of a dedicated group such as the Sisters of Mercy or some other church-affiliated organization.

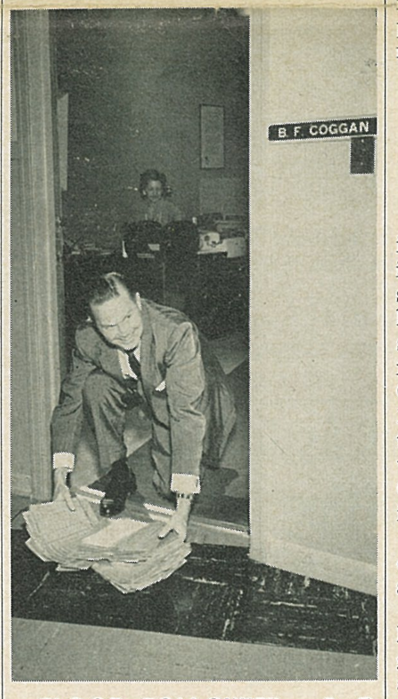
"Operating in this manner, there simply are no funds for expansion to keep up with the growth of the city," Naish said. "It is to provide for this vital need that the city-wide campaign will get under way next month."

Heading the industrial division of the drive is R. H. Biron, Convair vice president - administration. Also serving in this division is Julian L. Ashe, representative of the International Association of Machinists.

'RX' Ideas Great! Keep 'em Coming, Coggan Requests

Response to the current RX (Reduce Xpense) campaign at San Diego Division has been "most gratifying" and already is reflecting improved costs, B. F. Coggan, division manager, reported this week.

"Nearly 1,000 RX ideas were sent to me during the first week. I have read every one personally and made my recommendations thereon," he added.



FLOOD FOLLOWED — B. F. Coggan, SD Division manager, re-enacts scene that took place when he arrived at office morning after "RX" campaign started. "Early birds" had left a batch of ideas at his door! All are eligible for special "RX" cash awards which will be awarded monthly.

"This is more than three times the normal flow of cost reduction ideas. Your response to my appeal has been most gratifying. You are doing great. Please keep it up!"

The RX drive, aimed at making major reductions in operating expenses to improve the division's competitive position, was kicked off April 1. **Convairiety** scarcely was "on the street" before the ideas started arriving at Coggan's office in Plant 1, Bldg. 1. The first submitted arrived that same afternoon, and there was a pile outside the door of Coggan's office the next morning, when the office opened.

April 2 saw over 100 RX ideas delivered to Coggan, followed by about 200 the following day.

"I was much impressed by the high quality of your ideas," Coggan continued. "A large percentage showed deep and penetrating thought directed at our operations.

"Also, I note that the number of ideas generated by supervision shows a healthy increase."

Of RX ideas submitted during the first full week of the campaign, 40 per cent were from supervisors. (In the normal flow of

(Continued on Page 2)

"RX" Procedure Repeated:

Specific, practicable ideas for cost improvement are needed.

Write them out (preferably on ES or CIP form), include name, department number, clock number, plant, building and column location, and sign. At the top, write Project "RX." PLEASE do not use more than one or two staples on envelope.

Place in company mail to B. F. Coggan, SD Division manager, Bldg. 1. DO NOT PLACE IN SUGGESTION BOX.

One prize of $1,000 will be awarded each month for the best "RX" idea and one $500 prize each month for the second best. At the end of the four months, the best of the four $1,000 winners will receive an additional $2,000 Grand Prize.

Where eligible, authors of all "RX" ideas submitted will be considered for Employee Suggestion cash also, if their ideas are adopted.





GRADUATES—In top photo John Henning Jr. receives journeymen's certificate from H. A. Smith, right, chief of SD plant engineering. He has been assigned to Dept. 25. Below, James W. Gordon, right, receives his certificate from W. J. Wood of engineering loft section. Gordon has been assigned to Dept. 6-51. Both men are graduates of Convair SD apprentice program.

Nill Succeeded By Johnson in Systems Post

Paul S. Nill, chief of systems and procedures at Convair SD for the last three years, was feted by about 150 of his Convair friends and co-workers on his recent retirement.

Nill had been with Convair SD Division since October, 1952, when he joined the company as executive adviser to the division manager. In December of the same year he was appointed manager of factory methods and work standards, now industrial engineering. He later held posts of division controller and staff assistant to Division Manager B. F. Coggan before assuming his last position.

A native of Ohio, Nill had been with General Motors Corp. 32 years before coming to Convair, first with the Buick Motor Division at Flint, Mich., and from 1929 with the Fisher Body Division, Detroit, as general supervisor.

Succeeding him as chief of systems and procedure is D. L. Johnson.

Johnson, whose original home was Wisconsin, also joined Convair SD in 1952. Before that he had spent two years with Convair at Fort Worth, as assistant supervisor in industrial engineering. At SD he had been a factory methods assistant supervisor and supervisor before his appointment in 1955 as chief of planning and methods.



GOOD LUCK!—Convair SD friends of Paul S. Nill, chief of systems and procedures, wish him luck on retirement, April 3. Helping cut cakes are, left to right: D. L. Johnson; Clarence Smith (in background); his daughter, Frances Nill; and four of his former secretaries, Catherine Chase, Gladys Speed, Mary Laffoon, and Mary Gengler.

High Priority Action Assigned To All 'RX' Cost Cutting Ideas

(Continued from Page 1)

Employee Suggestions and Cost Improvement Proposals, ESs usually outnumber CIPs by four to one!)

"RX ideas have been arriving in such volume that I have had a special box put outside my office door to receive them," Coggan reported. "Even though it means burning midnight oil to me, the more ideas that flow in, the better I like it. The brainpower of 24,000 people is at work, and this is good."

High priority action was being assigned to all RX ideas. Following personal examination by Coggan (made the same day as received) the ideas with his comments and recommendations go by messenger to cost reduction section for prompt investigation. (Some have been so pat that Coggan put them into effect immediately by saying, "Do it.")

"Analysts in E. E. Hartzler's section are going all out to keep up with the volume, to combine careful evaluation with speedy handling," Dave Acker, manager of SD industrial engineering, reported.

'RX'

$8,000 in Awards

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego, Astronautics, Pomona, Antelope Valley-Holloman and the Mail) by Convair Industrial Relations. General Offices, San Diego, Calif., Logan Jenkins, editor-in-chief.

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SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



LATEST STYLE—Ruth H. Rudeen of Dept. 101 at Convair SD inspects newest style in safety glasses, prescription lenses with combination plastic and metal frame. Stylish safety glasses are available in variety of frames at Plant 1's safety crib in Bldg. 32. Frames run in price from $1.65 to $4.50, plus tax.

$7,500 in Gifts Approved at SD

Con-Trib-Club donations of $7,500 were approved at Convair SD last month together with additional contributions of $5,500 to youth activities.

San Miguel Hospital Association, Inc., will get $5,000 and International Guiding Eyes, Inc., $2,500, following action of Employees' Con-Trib Committee.

Recommendation of the Holloman AFB committee for $500 to the Central Youth Activities Committee and a further contribution of $5,000 for development of the Boy Scout Camp Mataguay were approved.

First reading was made of a proposed contribution of $1,000 to the United Jewish Federation of San Diego.

Six in Semi-Final Of Scholar Contest

Six semi-finalists were named last week in the Convair San Diego Management Club scholarship contest.

They are: Diane Monahan, Melanie J. Rohr, Toby H. Kraus, Bruce H. Weber, Fred J. Hunemuller, and Gunter Amtmann.

Selection of the winning boy and girl will be made today (April 15) by the club scholarship committee and three qualified outside judges, said W. S. Nader, committee chairman.

Winners will receive $1,000 scholarships to the university or college of their choice and the two boy and girl runners-up will be given $100 Saving Bonds.

All finalists and their parents will be introduced at the May 13 meeting of the SD Management Club.

Padre Tickets Free In CRA Drawing

Baseball season in San Diego opens Friday, but the first drawing for free Padre tickets at Convair SD opens today (April 15).

Sponsored by CRA, tickets given away in the initial drawing will be good for the first Padre home series at Westgate Park, extending April 17-29.

Boxes for the drawing have been located at employee services, Plant 1 (Bldg. 32) and 2 (Bldg. 4) and Rose Canyon. Entries should be written on a sheet of paper bearing the person's name, clock number, shift, department number and location and telephone number.

Only one entry per individual is permitted, and entries not carrying all the information listed above will be disqualified.

GEORGE KUESTER RETURNS TO SD

G. R. Kuester, industrial security chief at Convair Palmdale for the past five years, returned to San Diego last Monday (April 13) to resume his former post as SD Division guard chief. Succeeding him as security chief at Palmdale is R. S. Cook, formerly a security lieutenant.



CLOSE CALL—Emil Heckman (SD-Dept. 101) shows pieces of shrinking die which could have seriously injured his face. Flying pieces broke lens and twisted frames of safety glasses. Heckman escaped with minor laceration on cheek.

101 Now Attending SD Memory Course

Attendance for the first memory course, sponsored by CRA at Convair SD, has gone over the century-mark.

Registration for the present class closed last week with 101 persons attending the Thursday sessions in the House of Hospitality, Balboa Park.

Tentative plans call for another course to start in mid-September. Particulars will be announced later.

Division Saving $28,000 a Year By Recent ESs

Three Convair SD people, two men and a woman, all at Plant 2, have turned in Employee Suggestions during the last month which will save the division over $28,000 a year.

Elva S. Umberhocker of Dept. 223, Plant 2, received a check for $286.10, half payment for her first ES, recommending that the location of seals on F-106 shrouds be changed from the shrouds to the access doors. By simplifying the method of sealing the openings, the company will save $5,721 and 1,209 manhours a year.



Elva Umberhocker

J. R. Patnode's ES urged that adjustable brackets be used on the F-106 fuel transfer line instead of the permanent type for an estimated saving of $10,693 and 4,287 manhours each year. Patnode, Dept. 600-3 production planner, is receiving first payment of $534.70 now with a second payment due in six months. During the last month he had received two other ES awards, one for $50.40 and another for $112.20, partial payment.

During March, F. E. Hitchcock, steel heat treater of Dept. 223, totaled $9,537 yearly savings for Convair with his three suggestions, all dealing with the method of straightening channels for the lip assembly of the F-106 air intake duct. By his suggested method of hot forming it is now possible to reclaim expensive material and satisfactorily form the parts in a fraction of the time formerly consumed.





J. R. Patnode F. E. Hitchcock

Hitchcock has earned nearly $3,000 in ESs during his 12 years with Convair. He says that of the 40-some suggestions he has submitted, about half have been approved.

Convair 880s Leave Nests at SD For Visits to Edwards and Vegas

Two Convair SD jet transports are away from home this week, going through their paces on two different fronts.

Plane No. 1 was flown to Edwards AFB the first of the week by Don Germeraad, Convair SD chief engineering test pilot, for Air Force demonstration flights. Co-pilot was W. D. Carrier, production flight pilot; R. M. Bloom, flight engineer; A. E. Hunt, flight test engineer; and R. J. Dunn, instrumentation engineer.

The other 880 now going through the flight test program, Plane No. 3, flew to Las Vegas, Nev., last Saturday to go on display at the first World Congress of Flight. It will be on static display and will give one fly-by from McCarran Field with J. W. Knebel, test pilot, at the controls. Crew will include P. M. Prophett, SD assistant engineer-flight test, co-pilot; R. C. Schaefer, flight engineer; and W. S. Lowe, flight test engineer.

Following their return to home base at Convair SD this weekend, both planes will resume their flight test programs, with No. 1 continuing in the series of flutter tests and No. 3 going on with general evaluation flights.

Plane No. 3, second 880 to fly, made a successful maiden flight from Lindbergh Field March 31 with Knebel and Germeraad at the controls. This plane is the first to be equipped with the General Electric thrust reversers.

Last Wednesday (April 8) the two 880s soared into the sky on the same day, for the first time, after an all-out effort of ground and flight crews to get both planes flight-ready at once.

It was Plane No. 1's first shakedown flight after its return from Edwards AFB, where it landed following a fin failure. Plane No. 3 was undergoing air speed calibration. Two F-100 chase planes from Edwards AFB picked up the gleaming white and gold transports over Catalina Islands at 33,000 ft. The chase plane for No. 3 ship was a calibrated air speed pacer. F-100s have replaced T-33s as chase planes during 880 test flights as the T-33s were left behind when the Convair jetliners really got under way.

The two planes, together with plane No. 4, will be put through an intensive 14-month flight test program. Ship No. 2 is in the midst of a nine-month structural test program at the seaplane ramp structures test facility. Plane No. 5, first plane to go to a customer, will be the first in production flight test.

New Gamma Camera Eye Peers Into Steel Parts

On-the-spot inspection of massive parts for the missile launcher program is now being done at Convair SD by means of a "gamma camera" which can "see" through steel 5-in. thick and over.

In the past, it was necessary to transport the huge steel parts to the Los Angeles area where inspection was done by a subcontractor using a million volt X-ray machine.

The portable gamma camera, recently acquired by Convair SD, contains radioactive cobalt (Cobalt-60) as the source of radiation. The cobalt is in the form of a tiny capsule, approximately one-fourth the size of an aspirin tablet, which can be transported easily and used in places inaccessible to other types of nondestructive testing equipment. When not in use, the radioactive capsule is safely stored in an 800-lb. lead housing, known as the camera unit.

The new gamma camera unit, a "Multitron," is used at both Plants 1 and 2 on the missile launcher program by E. J. Yannaccone, trained operator of quality control process lab (Dept. 197-4). Work is under direction of G. R. Bailey, supervisor.

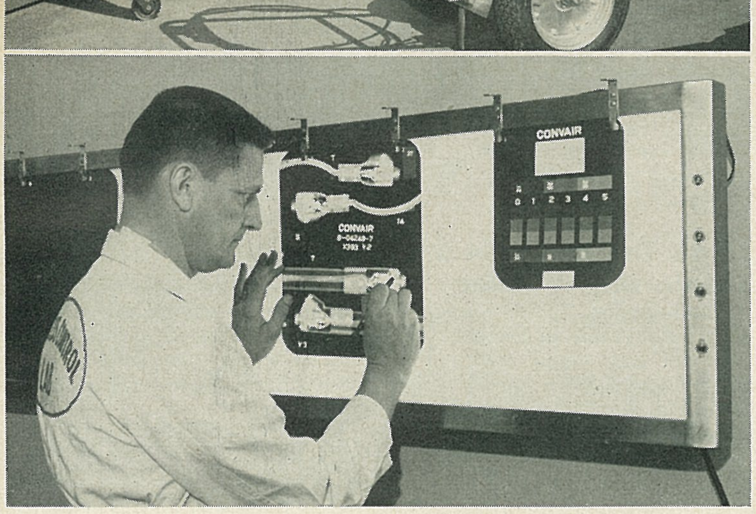
According to Bailey, "This new type of equipment makes possible inspection of welds in parts too thick to be penetrated by the X-ray equipment available. Advantages of gamma-ray radiography include its ready portability, simplicity of operation, relatively low cost, as well as elimination of all need of maintenance."

Lou Beauchamp, SD industrial hygienist, and Carol Purdy, health radiation physicist, explained that the gamma camera is perfectly safe for the men using it when proper safety precautions are observed.

The small amount of radiation received by the trained operators in all-day use of the cobalt source is far below the permissible amount allowed by the Atomic Energy Commission. Operators wear pocket dosimeters and film badges which are checked often to measure the amount of radiation to which they have been exposed. The operation area is patrolled constantly with gamma survey meters as a check on the radiation level.

"We especially want to remind everyone to observe the safety signs and flashing red lights placed around excluded areas when X-raying is in progress," concluded Bailey.





"SEEING" EYE—In upper shot, E. J. Yannaccone (SD-Dept. 197-4) tapes flexible film around steel part to be photographed by means of gamma ray. "Gamma camera" in foreground contains cobalt source. In lower picture, D. J. Wine inspects negatives on reader in X-ray lab at Convair SD Plant 2.

Two Friday Holidays Slated For Summer

Convair people at all divisions can look forward to two three-day weekends this summer.

Since both Memorial Day (May 30) and the Fourth of July fall on Saturdays this year, the Fridays preceding will be company holidays. Convair plants at San Diego, Pomona, Fort Worth, Daingerfield, and off-site bases will be closed from Friday (May 29) through Sunday (May 31), and from Friday (July 3) through Sunday (July 5).

CONVAIR MEN ACTIVE AT SAE CONFERENCE

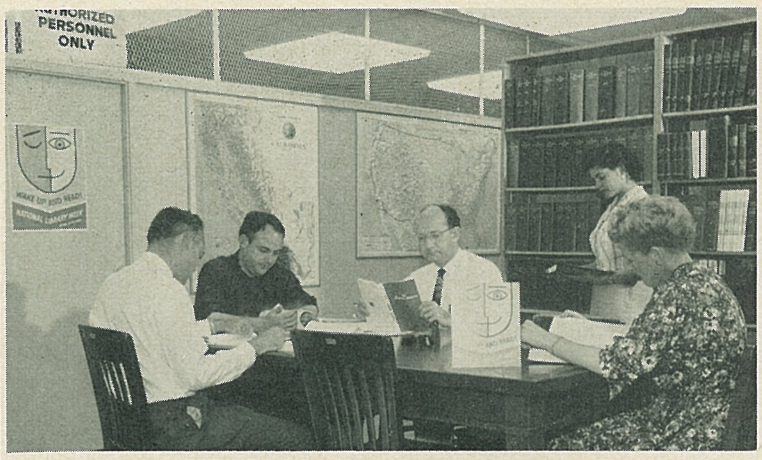
Four Convair men had major roles at the national aeronautic meeting of the Society of Automotive Engineers in New York City March 31-April 3.

R. A. Taylor of Convair SD engineering was secretary of a session on starting and servicing equipment for turbine transports.

M. L. Hicks of Convair FW was a member of a panel on "Make or Buy" problems. J. B. Ottestad of the Convair Dynapak project presented a paper on "Shaping by Plastic Deformation."

D. A. Heald of Convair Astronautics gave a paper on "Some Development Problems with Large Cryogenic Propellant Systems."

Over 2,000 experts in the missile and aircraft fields from all parts of the country attended the meeting.



NEW LIBRARY—Convair SD's technical library in Bldg. 5 draws a large crowd of people each day who use the expanded facilities for reading or technical research.

Engineering Library Takes Over Improved Quarters in Bldg. 5

Convair SD's large engineering library is well settled in new and commodious quarters on the second floor of Bldg. 5 at Plant 1 after its move from Bldg. 51 in the engineering building renovation program.

Located near the overpass entrance of Bldg. 5 to be more accessible, not only for engineering personnel but for the entire population of the plant, the library now occupies a floor space of 4,600 sq. ft.

K. G. Blair, chief librarian, said that by actual head count, over 300 Convair SD people are served at the library each day. "Since the move of the library, circulation has increased at least a third, which we attribute to the more central, convenient location," he explained.

Facilities are now being developed to keep pace with the growing research needs of the division—assisting in technical literature searches, obtaining bibliographies and research reports from government activities and other libraries.

Material available at the SD Division's technical library now numbers at least 20,000 books and bound periodicals and approximately 100,000 research reports, including micro cards.

The library subscribes to 400 technical journals in various languages and receives at least 600 research reports on different subjects each month. Number of new books acquired annually has increased from 350 in 1954 to 850 last year. This year the number will probably be around 1,200, said Blair.

Anyone in Convair SD or General Offices is eligible to use the library's facilities and may withdraw books or reports (with the exception of reference material) on a two-week loan basis. Classified matter is loaned only under security regulations.

18 Radio Antennas Link 880 to Ground Stations

All of the 18 antennas equipping the Convair 880 are now through the development part of the program and are in various stages of construction.

Antennas for communications, navigation, and weather radar are located in every part of the plane.

Contrary to popular belief, antennas are no longer wires.

"All antennas must be mounted as flush to the surfaces of the plane as possible," explained Ray Justice, Dept. 6-34 senior electronics group engineer in charge of the microwave, antenna, and radome groups. "The wires which on conventional planes go from the tail cap to the front of the planes have been replaced entirely by flat-mounted antennas."

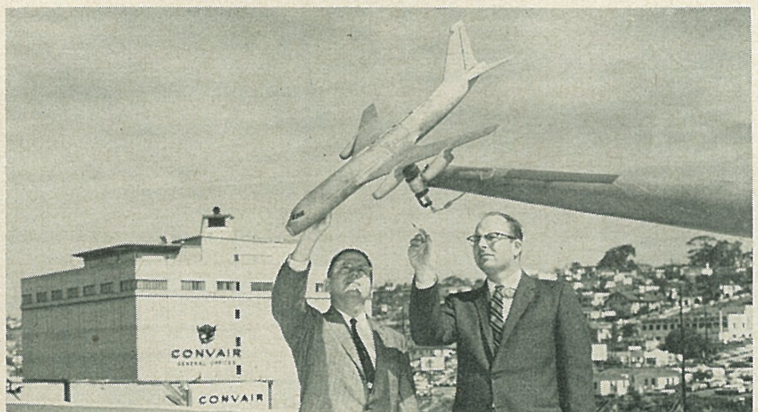
Antennas on the new jet transport are round, square, oblong, shaped like small boxes or cups or long shields—with the outside openings covered with plastic and wires carrying the energy from the inside to the "box."

For instance, that black "hump" on the top of the center fuselage is the 96-in. long automatic direction finding (ADF Sense) antenna. The entire tail cap at the top of the vertical stabilizer is a high frequency communication antenna. In the nose radome are located both the weather radar and the glide slope antenna for instrument landing. Others are placed in different parts of the fuselage.

Antenna research and development for the 880 has been going on since the jet transport was on the drawing board, over three years ago. Models of the plane with scale models of the different antennas attached have been checked out on the antenna pattern ranges atop Bldgs. 19, 51, and 4 at Convair SD Plant 1.

The models are rotated on towers, simulating free flight conditions, to test the antennas with energy generated from other locations.

Although antenna research has been in progress at Convair SD for over 10 years, the program has been greatly accelerated during the 880 research and development period.



LISTENING POST—Kirk Abbey and Milton M. Chazotte Jr. of Convair SD engineering check scale model of antenna under test on 880 model during antenna radiation pattern studies on roof of Bldg. 51. Other test equipment in program can be seen in background on roof of Bldg. 19.

25 New Autos Join SD Fleet

A fleet of 25 new 1959 station wagons and sedans rolled into Convair SD Division last week.

According to B. R. Hisaw, chief of transportation operations, Convair SD has entered into a two-year contract to lease the new vehicles with maintenance to be provided by Bay Shore Motors and University Motors, San Diego Ford dealers.

The new fleet includes 15 station wagons and 10 sedans—six Galaxies and four Fairlane 500s.

They replace the Chevrolets that had been used by the division for the last two years under a lease which ended Dec. 31. The lease had been extended to March 31 when the 31 vehicles were returned to the City Chevrolet Co.

Martin Transferred Back to San Diego As Rumbaugh Takes Over at Palmdale

William J. Martin, manager of Convair SD's Palmdale facility since 1955, has been promoted to special assistant for the F-102/F-106 programs to B. F. Coggan, Convair vice president and SD Division manager.

Before going to Palmdale to head operations there almost four years ago, Martin had been chief production flight pilot at Convair SD.

His successor as Palmdale manager will be W. H. Rumbaugh, chief of field operations at Palmdale since the F-102A program was started there.

Joining Convair in 1940, Rumbaugh has worked in flight maintenance and field operations during most of his time with the company. He had been assistant general foreman, general foreman, assistant superintendent and chief of F-102 field operations in San Diego. He was chief of field operations for the first flight test of the YF-102 at Edwards AFB.

A native of Findley, Ohio, he was associated with Signal Oil Co. in San Bernardino before joining Convair.

Cal. Daylight Saving Will Start April 26

Convair people living in California will set ahead their clocks one hour the last Sunday of this month (April 26) as the state goes on daylight saving time.

According to California state law daylight saving time starts each year at 2 a.m. the last Sunday in April and ends on the last Sunday in September.

All Convair folk of San Diego, Astronautics, and Pomona Divisions will be reporting to work one hour "earlier" on Monday (April 27).

Bunker Hill Visitors Inspect FW Factory

Convair Fort Worth played host to some 30 community civic leaders from the vicinity of Indiana's Bunker Hill Air Force Base recently.

The group, which came to Fort Worth via Barksdale Air Force Base in Louisiana, dropped in at Convair as a part of a Strategic Air Command briefing.

Woods Enjoys First Jet Flight to SD

W. P. Woods, chief tool engineer at SD's plant 2, is the first—and thus far only—San Diego-bound passenger to enjoy non-stop commercial jet service from New York.

Unable to land at its scheduled destination, Los Angeles, because of weather, the American Airlines 707 flew into Lindbergh Field as an alternate, a break for Woods. He got into his car and drove home, while the other passengers continued on by bus!



COMMUTER—Convair Fort Worth's J. T. Siler, senior structures engineer, saves gasoline by commuting to and from his home in McKinney, Tex. He gets 25 miles per gallon (at 25 cents per).

Ranch to Plant

Commuter Says It's Cheaper To Come to Work by Airplane

J. T. Siler of Convair Fort Worth's Dept. 6-2 literally flies to work each day and says that he's saving money, too.

Siler, a senior structures engineer, downs his coffee and cereal for breakfast, jumps into his Luscombe 8A plane and makes it to Fort Worth's Meacham Field from his farm in McKinney, Texas, in something like 30 minutes flat. He says it's about 50 air miles.

"There's no hustle and bustle of traffic up there," he said, pointing up to the wild blue yonder. "There aren't any red lights to slow me down either."

After he touches down at Meacham, he drives to work at Annex 2 and makes it in time to have a second cup of coffe before work.

Siler says it's cheaper to drive the plane to work than to use his car. The plane, which is valued at the same price as some of today's low-priced autos, gets 25 miles per gallon.

A veteran of the Air Force, Siler has been flying since 1939 but has had his plane for only three years.

There's a 1,600-foot runway on his 32-acre farm which provides adequate space for taking off and landing.



"Okay, Mary! Pull!"

Convair Folk Aboard West Indies Cruise

Thirty-three Convair Fort Worth people were aboard the MS Italia ocean liner recently on two different Shrine cruises to the West Indies.

Both cruises originated from Galveston on March 14 and 23 respectively and were destined for the British colony of Jamaica.

Among the Convair people aboard were the Jim E. Topliffs, the Kenneth Bellamays, the J. D. Todds, the Ed Tates, the Norman L. Varners, the Ed Wrights, the Hershel Gibbs, Dan and Dorothy Harper, the John A. Efirds, the B. R. Harpers, the Glen Hudsons, the Ronald Southerns, and the Ed Chaneys.

Bill Chambers, son of F. E. Chambers, manager of industrial relations and security, was also aboard, as were Otha Coburn, who operates the plant cafeteria, and Mrs. Coburn.

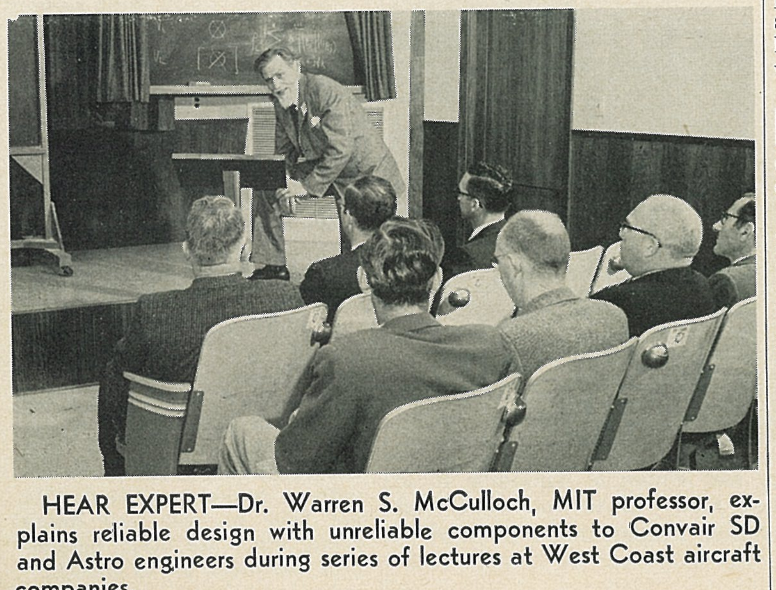
The cruises terminated in Galveston on March 22 and 31.

'Reliable Design, Unreliable Components' Discussed by MIT Prof. for SD Group

Over 100 Convair San Diego and Astronautics engineers and reliability men heard Dr. Warren S. McCulloch speak on "Reliable Design with Unreliable Components" at Convair SD Plant 1 recently.

Dr. McCulloch, professor of design in the research lab of electronics at MIT, Cambridge, Mass., is delivering a series of lectures to West Coast aircraft companies. He was brought to Convair under sponsorship of SD educational services department. Reliability working committee, chairmanned by Dr. A. M. Small, directed arrangements.

The audience was made up of Convair SD and Astro men who are especially concerned with the design, application, and use of complex electronics equipment for weapon systems and aircraft.



HEAR EXPERT—Dr. Warren S. McCulloch, MIT professor, explains reliable design with unreliable components to Convair SD and Astro engineers during series of lectures at West Coast aircraft companies.

Writing Award Fund Rewards 114 Authors For Articles in '58

Convair writers at all divisions totaled 114 articles published in technical or trade magazines during 1958.

Writers received $150 an article from the Convair writing award fund in lieu of payment from the magazines accepting the articles. The fund was set up in 1956 to encourage Convair people to submit articles of specific interest within the aircraft industry.

Until the fund had been established, little interest was shown in submitting articles to technical publications, as shown by the 17 published during the year before the program was started. The number increased to a high of 126 articles accepted during 1957.

San Diego Division authors led during last year with a total of 60 published articles. Fort Worth was second with 29; Astronautics, 15; and Pomona, 6. Three articles were accepted from the scientific research laboratory and one from General Offices.

Anyone interested in the program should consult the division public relations office on procedure. All manuscripts must be submitted through Convair.

T-29 Mod. Job Due For Test

First T-29 being modified at Convair SD for Air Force use as an airborne monitoring platform is due for completion within the next two weeks.

It will go into flight testing at SD the first of May before being ferried to Eglin AFB, Fla., next month for further off-site flight tests.

A second T-29, now undergoing similar electronics modification at SD Plant 1, is scheduled for completion this fall.

The two Convair-built planes will go into use at Eglin Gulf Test Range, Fla., during missile tests. The T-29s will be flown over the 400-mi. range before and during tests to check out ground radar and telemetering stations, to monitor frequency interference in the area, and to record data during missile launching and flight tests.

Ground Broken For New Lab

Ground breaking for a new laboratory testing facility at Convair SD Plant 1 started last week.

The new steel frame building (Bldg. 72) will adjoin Bldg. 79, south of the wooden mockup building. Construction is being done by Diversified Builders, Inc., of Los Angeles under supervision of SD plant engineering at approximate cost of $200,000.

The one-story building, scheduled for late June completion, will house hydraulic primary controls personnel and equipment of engineering's dynamic laboratories. Construction of the new facility is a part of the long-range program which eventually will see replacement of all dynamics lab facilities west of Bldg. 5 with new structures.

Plastics Conference Slated For Dallas

Designers will take a closer look at reinforced plastics from the aircraft and missile industry viewpoints at a one-day Regional Technical Conference to be held in Dallas April 28 at the Adolphus Hotel.

Nick Novelli of Convair Fort Worth's material and processes engineering is program chairman. The conference is sponsored by the North Texas Section of the Society of Plastics Engineers, of which David A. Daniels of FW materials and processes is secretary.

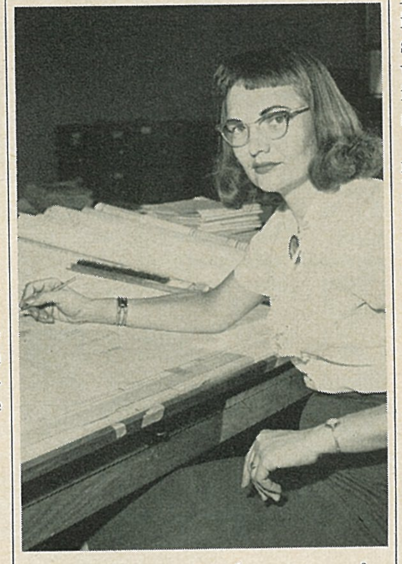
Quirk of Fate

Wartime Germany Experience Leads to Career in Drafting

It took a war to change Clare Hodgins of Astronautics engineering from a fashion designer to a design draftsman.

She developed her drafting skill in what was little more than a slave labor camp in wartime Germany where she was trapped by hostilities during a visit.

A German by birth, Mrs. Hodgins came to the United States with her family when she was 5. She became a citizen with her father. After attending secondary schools she was trained as a fashion designer, while her father built a successful interior decorating service.



MEMORIES—Talents now devoted to helping produce Atlas ICBM at Astronautics were acquired in wartime Germany by Clare Hodgins, above, of Astro engineering.

In 1939 her family was informed of a family inheritance in Germany. There was just one catch—money from it had to be spent in Germany. So back to Germany the family went, intending to put the daughter through a three-year art course.

Hitler had made things hard for those who had renounced their citizenship. Mrs. Hodgins was denied permission to move from the city of the family holdings to another where the art school was located. However, she was told that perhaps after serving in a labor camp for a year she might be granted a permit.

"I joined the camp with girls my own age, and labor I did," Mrs. Hodgins said. "But the worst part was the attempted brain washing. It didn't take and after a year I was right back where I started. No permit."

In the interim Germany and the United States went to war.

For a time she worked in a medical center. Then came an opportunity to take up drafting. She graduated and was sent to work in a factory turning out gyroscopes and other electronic war goods.

Her associates were slave laborers, Russians, French and Belgians. Supervisors were German. Each received two meals a day. Most were herded to and from work by armed guards and lived in guarded barracks. Because of her German birth, Mrs. Hodgins was allowed to live in a nearby village. She also received "pin money," a small cash amount passed out every two weeks. During the day she was just another slave worker. At night she and her father, also a factory worker, were closely restricted.

Near the end of the war a steady stream of Allied prisoners passed through town. Some fell from exhaustion. Mrs. Hodgins secreted a dozen of these at various points and shared her rations with them.

In March, 1945, the first Allied troops appeared.

"The first American I saw was a chaplain who came to the place I had gathered my GI patients," Mrs. Hodgins recalls. "I was so shaken up I couldn't answer his questions."

The chaplain returned her to headquarters where she was interrogated. One officer impressed her with his kind words. She learned later he was Gen. George Patton.

From March, 1945, until September, 1946, she worked for military units, awaiting permission to return to New York.

In 1949 she moved from New York to California and joined Astronautics about 18 months ago.

George AFB F-102s Fly to North Island

A squadron of F-102s from George AFB, Calif., flew to San Diego early this month to join Navy and other AF pilots of the 27th Air Division of NORAD in their first annual fly-in.

Purpose of the fly-in, which saw F-89s of the 437th FIS from Oxnard AFB joining the F-102s from the 329th FIS and the F4Ds of the VFAW-3 navy squadron, was to discuss teamwork and defensive tactics in their duty with the North American Air Defense Command.

Linda Dobbs Science Scholarship Winner

Linda Dobbs, 18, stepdaughter of William Duerson of the Convair SD mail room at Plant 1, has been awarded a science scholarship to the University of California at Berkeley.

The scholarship provides a year's tuition and expenses at the University. Linda has had a straight A average in her major of mathematics at Lincoln High School where she will be a June graduate.



FINALISTS—Daughters of two Convair FW families were finalists in Miss Fort Worth contest this month. Primping before going on stage, left to right, Ann Gross and Mary Laura Littlejohn. Ann is daughter of Mel Gross, Dept. 17. Mary Laura is daughter of W. M. Littlejohn, Dept. 46.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Ltd., of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N.Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N.J., electric motors, generators.



WRITERS—Aviation writers of Houston, Dallas and Fort Worth are shown at Carter Field in Fort Worth just before takeoff in Canadair 540 for press demonstration flight.

Canadair 540 Meeting a Warm Reception Wherever it Goes

"When we're talking to people who have operated Convairs, we don't have to sell them on the quality or performance of the aircraft.

"They've already sold themselves."

That's the reaction reported this week by a Canadair, Limited, team which is showing off the new Canadair 540 turboprop airliner and executive transport.

Ken MacDonald, a transplanted Scotsman who is sales manager for Canadair in Montreal, Canada, told a group of aviation writers at a meeting in Fort Worth April 7 that the new plane is meeting a warm reception everywhere it stops.

The writers, only a few minutes before, had made a one-hour demonstration flight in the plane, flying out of Fort Worth's Amon Carter Field.

All the passengers indicated they were pleased with the plane's rate of climb—they were at 20,000 feet in 15 minutes. They also indicated they were pleased with the quiet performance of the plane's Napier Eland engines. Each of the two power plants revs up to 3,500 hp.

Passengers appeared most impressed, however, with the lack of vibration in flight—even in a fast climb.

Other Canadair members of the sales team making a nationwide sales tour are B. G. Smith, assistant sales manager, and G. Haynes Davies, director of public relations.

The plane earlier had been to New York, Washington, Atlanta and Houston. From Houston, it flew aviation writers to Fort Worth, returned them to Houston that night.

It flew back to Fort Worth on Thursday, April 9, to fly groups of Fort Worth and Dallas business and civic leaders. On Friday, it flew members of Convair Fort Worth's division operating council.

While at Fort Worth, it also flew representatives of airlines and business firms which operate executive transports.

It was due then to fly to Las Vegas to be on hand for opening of the World Congress of Flight, in which a number of Convair planes were also scheduled to participate.

From Las Vegas, the plane is due to continue its tour with stops in St. Louis, Chicago, Detroit, Minneapolis, Winnipeg, Edmonton, Calgary, Vancouver, Seattle, San Francisco, and Los Angeles. In all, it is visiting 19 North American cities over a route of some 12,600 miles.

The 540 is basically a Convair 440 transport engineered to incorporate the turboprop engines. It is being built in Montreal with the tooling originally used by Convair at San Diego to produce the 440.

Flight crew handling the ship is made up of Bill Longhurst, pilot, Michael Randrup and Ian McTavish.

Commissioning Set For Today

GROTON — A nuclear submarine which enables man to outperform fish will be formally commissioned today (April 15) at the yards of her builder, Electric Boat Division.

Highlight of the commissioning ceremonies will be an address by the Vice Chief of Naval Operations, Adm. James S. Russell, USN.

The Skipjack, which embodies the celebrated blending of the blimp-shaped hull with nuclear propulsion, has shattered all submarine speed records since builder's trials commenced on March 8. The revolutionary 252-foot, 2,830-ton sub's performance has drawn high praise from Navy and Atomic Energy Commission officials since the start of sea trials.

Stromberg-Carlson Names New Secy.

ROCHESTER — Appointment of Edward Diamond as secretary and general counsel of Stromberg-Carlson Division has been announced.

Diamond, who formerly was associate general counsel of the Atomic Energy Commission, assumed his new duties last week. In the position of secretary he will succeed Arthur F. Gibson, who will retire in April after serving with Stromberg-Carlson for 47 years.

BREWTON BECOMES A VICE PRESIDENT

Roy R. Brewton, Convair controller since 1956, has been named a vice president of Convair Division of General Dynamics Corporation, J. V. Naish, president, announced recently.

Brewton has been with Convair General Offices at San Diego, Calif., since 1943 following the merger of Consolidated Aircraft Corporation and Vultee Aircraft, Inc. He had been with the Vultee Aircraft, Inc. plant at Downey, Calif., for over 17 years as assistant treasurer in charge of taxes.



Roy Brewton

At San Diego he served as executive accountant until his appointment as assistant controller May 16, 1952. A year later he was named director of general accounting, first for Consolidated Vultee and later for Convair after merger of Consolidated Vultee with General Dynamics in 1954. He was assistant controller from August, 1955, until Feb. 13, 1956, when he was named controller.

No. 13 Ticket

Pioneer Canada Private Pilot Recalls Barnstorming Days

Exactly 40 years ago this month Convair SD's Bert A. Shields, Dept. 15-6, received his private flying license, the 13th that Canada had ever issued.

Now he calls upon his long experience in the development of aircraft in contributing to the operations manual for the Convair jet 880.

A youngster when the Wright Brothers flew first in 1903, Shields learned to fly in the Royal Flying Corps where he eventually served as flight instructor, 1917-18.

At the end of World War I, Shields was one of the first in line for a private license. One issued April 8, 1919, proclaimed Shields the 13th person to qualify in Canada for private flying.

Crossing the border later that year, he was issued license No. 543 by the U. S. Navy and Army Cognizance Board.

In the U. S. Shields promptly posted a number of "firsts."

On May 1, 1919, he had his own "airline" in operation. Flying from a potato field, he transported cargo from Banburger's Department Store in Newark, N. J., to Atlantic City—a distance of about 100 miles.

"It was apparent that money was to be made by taking people for airplane rides," Shields recalled.

"My plane, a Canadian version of the Curtiss-Jenny, was a two seater and I could only handle one passenger at a time. I charged $15 for a 10-minute ride. Later I sat one passenger in the other's lap and doubled the income!"

In 1920 Shields set a record for the longest solo ever registered up to that time in a seaplane. He flew 1400 miles—from St. Petersburg, Fla., to Springfield, Mass. It took six weeks and required two overhauls!

"The longest distance I could cover in one hop was 100 miles," Shields said. "That was all the fuel the 'Flying Fish' could carry. I followed the coastline and fueled the plane with five gallon cans of gas."

In 1927 Shields started the Sunrise Flying Club in New York. Now, at the same spot where the club once operated, is New York's International Airport at Idlewild.

Shields foresaw the need for ground schools and when universities and colleges sought qualified instructors he was ready. In 1937 he headed a staff of instructors who taught ground schools at Columbia University, Brooklyn Polytech and NYU.

During World War II Shields rose to the rank of commander in the U. S. Navy where he was superintendent of ground school training at NAS, Hutchinson, Kan., and later officer in charge of the Point Mugu airstrip.

He authored a book in 1942, "Air Pilot Training," which is now in its fourth edition.

Fithian to Address Institute Meeting

Jim Fithian, Astronautics electronics engineer, will address a 7:30 p.m. meeting of the Electronics Technical Division, American Institute of Electrical Engineers, set for the Naval Electronics Laboratory.

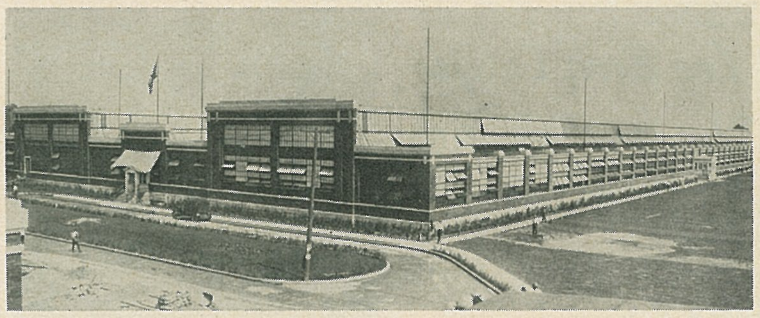
Fithian will discuss "Solid State Switching Circuitry." All Astro employees and guests are invited. C. L. Hitney, ext. 2324, will supply details.

Job Classification Cheyenne Problem

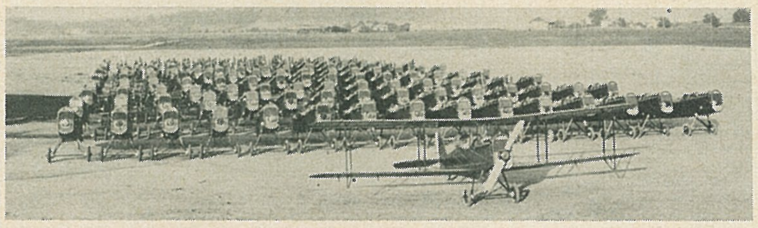
J. N. Mattson, Astronautics industrial relations representative at Warren AFB, Wyo., reports a rather unusual applicant among the first to seek employment with Astro through the new Cheyenne employment office.

A bearded old-timer, complete with Stetson, levis and high heeled boots, shuffled up to the counter and asked for employment as a sheepherder.

"Figure any outfit settin' up business in this country needs a good herdsman," he said.



DAYTON-WRIGHT—This was Dayton-Wright's Plant 1 at Dayton, Ohio, in June of 1918 at peak employment. Below are fuselages of DH-4s, built by Dayton-Wright.



Post-War Private Plane Market Proves a Bust

(Another installment in history of companies that contributed to ultimate formation of Consolidated Aircraft appears below.)

Early in World War I, Washington decided to purchase fighter aircraft from the Allies and to concentrate domestic manufacture largely on training planes and the British-designed DeHavilland 4, a two-place reconnaissance bomber. The first sample DH-4 arrived from England in July, 1918, and was dispatched to Dayton-Wright at Dayton, Ohio, for study. Modified to accept the new Liberty engine and American machine guns, it was test-flown Oct. 29 by Howard Rinehart.

The Army eventually contracted with Dayton-Wright for 5,000 DH-4s and 400 SJ trainers, giving the company the largest dollar volume of any aircraft manufacturer with which it dealt. At the peak of operations the company employed 8,000 in three plants in the Dayton area.

Like other manufacturers, Dayton-Wright hoped a market for private craft would develop after the war, since the training program had taught thousands of young men to fly. The company brought out two cabin models in 1919 (to outmode what it described as "unsightly flying togs") and displayed a small open-cockpit sports craft, the Messenger. It built a monoplane racer with retractable wheels (for photo see **Convairiety**, March 18) and a float-mounted cabin plane for use in the Canadian woods.

As early as June, 1919, Orville Wright anticipated the lean years ahead when he wrote: "The expense involved in putting the aeroplane business on a sound commercial basis will be such that small, if any, dividends are likely to come from it for some time . . . I therefore send in my resignation, in so far as salary is concerned, without withdrawing from any of my duties as consulting engineer."

General Motors Corp. acquired part of the company's assets and good will in 1919 for $1,096,000 in debenture stock, thus making Dayton-Wright a subsidiary. The Dayton-Wright Co. (which lost "Airplane" from its title in the 1919 reorganization) was dissolved by GM in 1923.



JENNYS TO JETS—Bert Shields, aviation pioneer (on right), now working on operations manual for 880, and G. P. Williams, assistant supervisor service publications at Convair SD, check out data in 880 cockpit.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period April 1 through April 15:

Twenty-five-year: Dept. 31, C. M. Szymczak.

Twenty-year: Dept. 6, Michael Dublin, A. R. Lambert, A. B. Mandeville; Dept. 25-1, G. A. DeMarino; Dept. 31, W. C. Roberts; Dept. 180, L. R. House; Dept. 603-3, E. F. Gurling.

Fifteen-year: Dept. 3-3, Lois W. Tenwolde; Dept. 6, D. M. Feeney, J. A. James; Dept. 8-5, Harry Lund; Dept. 14-9, J. G. Barney Jr.; Dept. 15-6, L. J. Solheid; Dept. 31, J. W. Dudbridge; Dept. 216, Mary W. Wright; Dept. 267, C. P. Welch.

Ten-year: Dept. 6, R. F. Cross III, Billie L. Henry, H. C. Jackson Jr., Mable H. McManus; Dept. 8-5, F. H. Thatcher Jr.; Dept. 21-1, O. F. Farish; Dept. 34-1, J. H. Barraclough; Dept. 97-7, Patricia W. Pate.

Dept. 115, N. P. Kuntz; Dept. 138, Rose M. Boeckel; Dept. 139, Leona W. Taylor; Dept. 180, W. J. Lane; Dept. 188-8, Hester C. Nielson, Merle P. Riggs, Evelyn S. Seley, Rachel E. Smith.

Dept. 201, Opal M. Scheidt; Dept. 205, Ruby J. Fowler; Dept. 215, L. F. Jones; Dept. 231, B. F. Pharris; Dept. 403, James Lissey, T. M. McCoy; Dept. 407, Dorothy K. Richards; Dept. 603-0, D. L. Downing.

Promotions

Promotions and transfers to or within supervision effective March 30:

Dept. 6-21, Engineering: To chief engineering, W. W. Fox. To asst. chief engineer-product design, R. P. White.

Dept. 15-3, Customer Service: To service parts prov. asst. supervisor, P. M. Brown.

Dept. 34, Material Procurement: To purchasing agent, V. M. Burns. To buying supervisor, O. Proctor, W. S. Severson, H. F. Warn.

Dept. 97-0, Data Processing: To clerical asst. supervisor, R. L. Reilly.

Retirements

ANTHONY—R. C., Dept. 4. Seniority date July 15, 1952, retirement effective March 31, 1959.

BATT—A. G., Dept. 407. Seniority date Dec. 8, 1947, retirement effective March 27, 1959.

BOND—Val, Dept. 216. Seniority date Oct. 3, 1950, retirement effective March 27, 1959.

BOTHWELL—A. A., Dept. 25. Seniority date Dec. 6, 1950, retirement effective March 27, 1959.

DOUGLASS—J. F., Dept. 407. Seniority date July 29, 1947, retirement effective March 31, 1959.

GAUGH—H. E., Dept. 25. Seniority date May 28, 1951, retirement effective March 30, 1959.

HADZOR—J. H., Dept. 216. Seniority date Oct. 23, 1950, retirement effective April 3, 1959.

LA BARRE—Elizabeth M., Dept. 116. Seniority date Sept. 19, 1947, retirement effective April 3, 1959.

QUATRALO—Louis, Dept. 25. Seniority date Nov. 11, 1952, retirement effective March 30, 1959.

SCHELLER—J. H., Dept. 25. Seniority date Dec. 29, 1942, retirement effective March 27, 1959.

SHURMAN—L. E., Dept. 192. Seniority date March 30, 1948, retirement effective March 27, 1959.

Personals

We wish to thank our many friends at Convair, and the company itself, for their kindness and expressions of sympathy during our recent bereavement. Also those who contributed to the American Cancer Society.

Mrs. Gordon W. Graff
Gordon A. Graff
Bette C. Graff

* * *

Our heartfelt gratitude to the many personal friends and associates of Milburn C. Copold, throughout Convair, for the warm friendship and expressions of sympathy and understanding as evidenced by the multitude of messages, cards and beautiful floral offerings.

Mrs. Milburn C. Copold
Justine Brooke Copold
Steven David Copold

* * *

I would like to express my gratitude to the employees of Convair for the kind expressions of sympathy when I lost my husband, Chester I. Lothian, Dept. 231.

Mrs. Anne A. Lothian

* * *

I would like to thank my fellow workers in Dept. 231 for their kind expression of sympathy during my recent bereavement, and also my supervisors for their understanding during my husband's illness.

Mary Acker, Dept. 231

* * *

I want to thank Dept. 25 personnel in the Model 8 fly-away facility for the beautiful flowers sent to me when I was in the hospital recently.

Carroll M. Clark, Dept. 25

Births

BARENO—Daughter, Myrna Patricia, 6 lbs., 8 oz., born March 17 to Mr. and Mrs. L. P. Bareno, Dept. 31.

BOERS—Daughter, Barbara Anne, 5 lbs., 3 oz., born March 20 to Mr. and Mrs. Kenneth B. Boers, Dept. 115. Mother, Phyllis, formerly Dept. 702.

BOSCO—Son, John Francis, 7 lbs., 14 oz., born March 20 to Mr. and Mrs. G. H. Bosco, Dept. 6.

DICKINSON — Son, James Frank, 7 lbs., 3¼ oz., born March 22 to Mr. and Mrs. J. F. Dickinson, Dept. 31.

SMITH—Daughter, Mary Frances, 6 lbs., 2 oz., born April 5 to Mr. and Mrs. H. S. Smith, Dept. 292-1.

THOMAS—Son, Bryce R., 6 lbs., 6 oz., born April 4 to Mr. and Mrs. W. L. Thomas, Dept. 15.

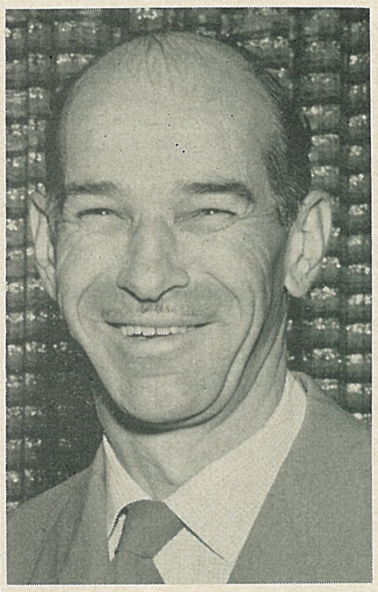
WHERRY—Son, Kevin Ray, 7 lbs., 12 oz., born April 5 to Mr. and Mrs. W. A. Wherry, Dept. 135.

Deaths

McCASSEY — George L., Dept. 603. Died April 2. Survived by wife, Liesel; three daughters, Heidi, Monica and Carla; mother, one brother and two sisters.

Lost & Found

FOUND—Small black male dog, part Spaniel, Saturday (April 4) at Pecan Park. Owner call Bernice Schaubel, ext. 2681, Plant 1, or HI-4-5278 evenings.



TWENTY-FIVE—Alfred Stieringer, assistant foreman in Dept. 123, celebrates 25th anniversary with Convair. He joined company in Buffalo and moved to San Diego with them in 1935.

Repeat Boron Trip Set for Rockhounds

Rockhounds at Convair SD have scheduled a repeat trip to the Boron area near Edwards AFB April 25-26, Dan Whorton, commissioner, reported.

Thirty-three members attended the outing to the same location in March, finding numerous specimens of petrified palm and wood, and green jasper. They also visited the borax plant and saw the gem and mineral show at Boron.

Whorton directed members to take Highway 466 to the Clay Mine Rd. (10 miles west of Boron) which will be marked by CRA markers and streamers. For more information contact Whorton, ext. 426, Plant 1.

SD Ham Elections To be Held in May

Radio Club members at Convair SD were reminded by J. B. Baker, commissioner, that a good time to check out on the SSB equipment will be at either of the two meetings still on tap for this month—April 16 and April 30.

Looking forward to next month, Baker said the club's WAS contest will run from May 1 to July 1. Prizes will be awarded for both leading novice and general classes.

As a result of a by-law amendment at the last meeting, the election of officers has been advanced one month. Election will now be held at the May 14 meeting, Baker said.

Plant Keg Tourney Starts on Weekend

Bowlers from Convair SD this weekend (April 18-19) will jam alleys at Pacific Recreation to kick off the 18th annual Plant Championship tourney.

The initial weekend of activity will see over 90 teams competing for trophies and plant titles, Jim Hayman, commissioner, said last week. He termed the turnout excellent and said the total number of teams entered compares favorably with last year's participation which included keglers from Astronautics.

Following on the weekends of April 25-26 and May 2-3 entrants will vie in doubles and singles.

Judo Classes Move Back to Park Site

Judo classes, offered by CRA at Convair SD, will again be held in the Federal Bldg., Balboa Park, Pete Beyrer, commissioner, said last week.

They will not be held at the Gillespie Gym in El Cajon. Classes will continue in the Federal Bldg., at least until June 1. An attempt to find a suitable building, which can be used permanently by the group, is being made.

Classes are held each Wednesday and Thursday from 7-8:30 p.m.

Choralaires Plan Concert for May 7

The Choralaires, Convair SD's mixed vocal chorus, will present their third annual concert for Convair families and friends May 7 at Hoover High School Auditorium.

A special added attraction of the concert, which starts at 8 p.m., will be the appearance of the Convair Pomona Missile Men, an all-male chorus, W. A. Vogel, director, announced last week.

New Look Planned For Archery Club Shoots in Future

Archery Club events at Convair SD will take on a "new look" in the near future, according to Bob English, club president. To supplement the regular field competition, such events as flight shoots, hunter rounds, and special skill shoots will be included, he said.

On April 16, archers from both SD and Astro will hold a joint meeting at the CRA Clubhouse on Pacific Hwy. at 7:30 p.m. At this time, the winner of the hunting contest, who will receive a custom-made bow, will be announced.

Two Convair SD archers took home prize hams in the "April Fool" shoot, staged by the Southern Border Archery Association. Local winners of the tourney, which attracted contestants from the Southern California area, were Harry Ross (Dept. 600-6) and Bob Mitchell (Dept. 603).

All Phipps, club spokesman, reported that the next big event staged by the S.B.A.A., a regional archery championship shoot, will be hosted by the Convair SD Archery Club June 14.

'Hound' Event Set For SD Car Club

Sports Car Clubbers at Convair SD have planned a three-hour Hare and Hounds event which will depart the San Diego Zoo parking lot at 7:30 p.m. this Saturday (April 18).

Lime markers of three different colors will be dropped on the rally route which will end up at Langhorst Restaurant near La Mesa Airport. A 50¢ entry fee will be charged for non-members. For additional information contact Dick Mobraaten, ext. 2451, Plant 1.

New club officers will be installed at a dinner at 8 p.m. at Lawton's Restaurant in La Mesa. They are Skip Carpenter, president; Bob Turner, vice president; Virginia Weiner, secretary; and Tom Jackson, treasurer.

Movies will be shown at a meeting tonight (April 15), starting at 7:30 p.m. at the Natural History Museum, Balboa Park.

92 Square Dancers Graduated at SD

Ninety-two Hoedowners from Convair SD were graduated March 31 after successfully completing the intermediate course, P. E. Liggett, commissioner, reported.

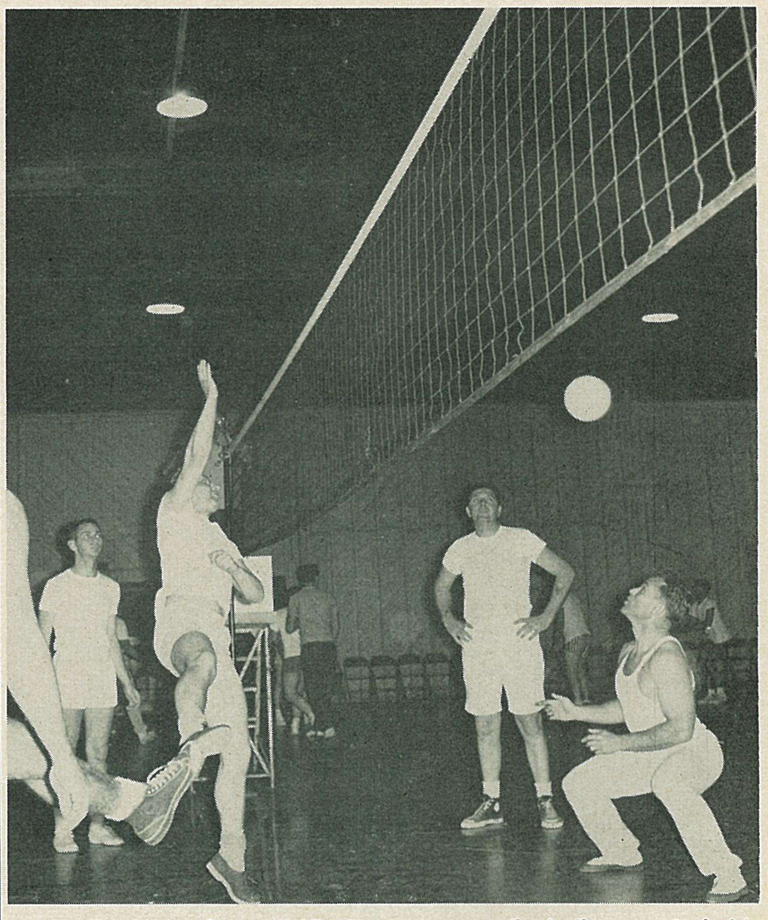
He reminded interested Convair SD folk that registrations for the new beginners class will remain open until April 20. They can be made at employee services, both Plants 1 and 2.

Two callers will be on hand April 25 when the club holds its second party night at the new location—University Heights Community Center, 4044 Idaho St. Both Vat van der Walker and Ed Berryman will call for the "Spring Fever" dance.

Globe 'Streetcar' Discount Offered

Tickets are still available at Convair SD employee services, Plants 1 and 2, to the current Old Globe Theater production, "Streetcar Named Desire."

Reduced CRA prices are two-for-one at $2.25 and $1.75 to Convair night this Sunday (April 19).



HEADS UP!—Convair SD shop league volleyball currently holds forth weekly at Balboa Park Federal Bldg. Structure team members (on left) are W. D. Bowers and G. Taylor; at right are Dept. 3 volleyballers Harry Benner and A. B. Daddi. Action photo was snapped by Ron Ainsworth of the CRA Camera Club.

Volleyball Moves Into Fourth Round

Shop volleyball at Convair SD today (April 15) moves into its fourth round, with a full schedule of games on tap for all eight teams.

In the first two rounds of American League competition, Structures notched two wins, beating both Dept. 3 and Dynamics. Other victories were scored by Dept. 280 and Dept. 3.

In the National League, Parts Sales and Industrial Engineering each scored two victories. Manufacturing Control and Dept. 603 were still looking for their first win.

Ice Skaters Plan Outing on Sunday

Members and guests of the Convair SD Ice Skating Club will journey to the Los Angeles area this Sunday (April 19) for morning and afternoon sessions on different rinks, Bud Davies, commissioner, reported.

Any interested Convair folk are invited to attend the outing which will leave the Bldg. 19 parking lot Sunday at 8:30 a.m. Time table includes a 10 a.m.-12:30 p.m. skate session at the Paramount Ice Arena and a 2-4:30 p.m. workout at the Ontario Ice Bowl.

Transportation will be by private car, Davies said. Additional information can be obtained by contacting him at ext. 2484, Plant 1, or JU-3-4325, after 6 p.m.

Sets of Color Photos Sell at Bargain Rate

Employee services at San Diego Division (both plants) this week is conducting a special sale on large color photographs.

Sets of four are on sale for 25 cents a set. Photos are 12 inches by 16½, on heavy gloss paper suitable for framing. They are flight pictures of the F-102, the R3Y, the T-29 and the 440.

Convair Golf Club To Elect Officers

Convair Golf Club will elect a new slate of officers at a meeting at 7:30 p.m., April 24, in Room 1 of the Conference Bldg., Balboa Park.

All members are urged to take part in the election. Refreshments will be served and door prizes given away.

Entries open today for the club's annual match play championships June 7, 14, 20-21, at Flying Hills, Torrey Pines and Rancho. Established handicaps will be required. Phone entries to Alma, ext. 218, Plant 2; or H. V. Purnell, ext. 1313, Astro. Deadline for entries is May 22.

RADIO CLUB VISITS MIRAMAR RATCC SITE

Thirty Radio Club members from Convair SD were among the first outside groups to visit the Radar Air Traffic Control Center at Miramar NAS. They heard a lecture before touring the Federal Aviation Agency facility, which regulates both civilian and military air traffic.



HUNGRY HOGANS—The kitchen was full of "chefs" anxious to sample the cooking at the fifth annual dinner-dance sponsored by the Convair SD Fishing and Gun Clubs at the Balboa Park Club. From left: W. E. Gille (Dept. 25), Joe Aguilar (Dept. 3-1), G. G. Grantham (Dept. 230) and son, John Grantham, Bob Menzie (Dept. 31), Dale Cromartie, CRA commissioner, and Don Bryson (Dept. 102).

CRA Sports & Recreation Convairiety

CRA Schedules 20 Events For April 26 Horse Show

Riding Club members from Convair SD will stage one of their biggest events of the year April 26 at Palomar Stables, Mission Valley, when contestants vie in 20 classes for Horse Show ribbons and trophies.

Spectators will be admitted free to the day-long show which starts at 9 a.m. (daylight saving time). Last year more than 1,500 watched as 200 contestants took part in this preliminary to the National Horse Show staged by the club later in the summer.

In morning competition 12 classes for children and teen-agers will include English equitation, Western horsemanship, English and Western pleasure and children's jumpers.

Afternoon classes, the majority of which are for adults, include hunters, trail horse, English and Western pleasure, three-gaited horse, and jumper.

Open to all age groups, post entry fees are $2 for children and young riders under 18, and $3 for over 18 and adults.

The show is accredited by the San Diego County Horse Trainers Association and will give points toward the Annual High Point Award.

Trophies and ribbons will be awarded through 10 places in all 17-and-under classes and through five places in all other classes.

C. L. Pogorel, commissioner, announced the following would handle show duties: F. C. Darnell, show manager; V. G. Paul, ring master; and R. L. Robertson, announcer. In case of heavy rain the show will be postponed one week.

Movie, Lecture Set For SD Astronomers

The Astronomy Club at Convair SD has scheduled movies and a guest speaker for two meetings to be held at the Gillespie Field Clubhouse in May.

On May 1 members and guests will see "The Story of the Atlas Missile" and another film concerned with putting the Atlas missile into orbit.

At the May 15 meeting, Dr. W. C. Erickson of the Convair scientific research laboratory, who is a specialist in radio astronomy, will show slides and conduct a question and answer session on the latter subject.

Any interested Convair folk are invited to attend the meetings which start at 8 p.m.

EASTERN SD FAIR TICKETS REDUCED

Reduced price tickets for the seventh annual Eastern San Diego County Fair to be held at Gillespie Field, El Cajon, May 27-31, are available at employee services, Plants 1 and 2. Tickets are priced at three-for-a-dollar or 35¢ each, a savings of one-third over the regular admission price.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY CLUB—Joint SD, Astro meeting tomorrow (April 16), 7:30 p.m., CRA Clubhouse on Pacific Hwy.

ASTRONOMY CLUB—Meeting May 1 and May 15, both at Gillespie Field Clubhouse starting 8 p.m. Movies on the Atlas missile to be shown at the former and a talk on radio astronomy by Dr. W. C. Erickson at the latter.

BADMINTON—Organized play and instruction, 7:30 p.m., Federal Bldg., Balboa Park.

BOWLING — Plant championship tourney starts this weekend (April 18-19) at Pacific Recreation.

BRIDGE CLUB—Session April 21, 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CAMERA CLUB—Model shoot April 26 at Cuyamaca state park. Group leaves Pecan Park at 10 a.m.

CHESS CLUB — Meets each Wednesday, 7:30 p.m., CRA Clubhouse on Pacific Highway.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse. Third annual concert May 7, 8 p.m., at Hoover High School Auditorium.

DELTA DIVERS — Meeting April 28, 7:30 p.m., Museum of Natural History, Balboa Park.

GARDEN CLUB—Annual Rose Show April 19, Floral Assoc. Bldg., Balboa Park. Open to public 1-5:30 p.m. Admission is free.

GOLF — Convair SD entries open until April 24 for San Diego IRC tourney. Register at employee services, both plants. Convair Golf Club election of officers at meeting April 24, 7:30 p.m., Room 1, Conference Bldg., Balboa Park. Entries now open for annual club championship tourney. To register call Alma, ext. 218, Plant 2.

ICE SKATING — Outing to Paramount and Ontario ice rinks in Los Angeles April 19. Group leaves Bldg. 19 parking lot at 8:30 a.m.

JUDO—Instruction every Wednesday and Thursday, 7-8:30 p.m., Federal Bldg., Balboa Park.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3271 University Ave. Admission: adults, 25c; children, 10c.

RADIO CLUB — Meeting tomorrow (April 16), 8 p.m., at Harbor Drive headquarters.

RIDING CLUB — Meeting tomorrow (April 16), 7:30 p.m., at Gillespie Field Clubhouse to finalize plans for Convair Horse Show, April 26, starting 9 a.m. at Palomar Stables, Mission Valley.

ROCKHOUNDS — Repeat trip to Boron area April 25-26.

ROLLER SKATING—Monthly skate night Monday (April 20) at Skateland, Front and G Sts., 6:30-9 p.m. Free tickets at employee services, both plants.

SOFTBALL — Organizational meeting for shop league competition tomorrow (April 16), 5 p.m., in CRA Clubhouse on Pacific Hwy.

SPORTS CAR CLUB—Meeting tonight (April 15), 7:30 p.m., Natural History Museum, Balboa Park. Hare and Hound event April 18; cars leave San Diego Zoo parking lot at 7:30 p.m. Installation of officers April 25, 7:30 p.m., at Lawton's Restaurant in La Mesa.

SQUARE DANCING — Registration for new beginners class open until April 20. Party night April 25, 8 p.m., University Heights Community Center, 4044 Idaho St.

SWIMMING—Next free swim night Saturday (May 2), 7-9:30 p.m., Mission Beach Plunge. Tickets at employee services, both plants, and from departmental representatives.

VOLLEYBALL — Shop league plays Wednesdays and Thursdays, first game starting 6:30 p.m., Federal Bldg., Balboa Park.

Shop Leagues Set Softball Meeting Date

An organizational meeting for shop league softball at Convair SD will be held tomorrow (April 16) starting at 5 p.m. in the CRA Clubhouse on Pacific Hwy.

Plans call for two leagues with six teams in each, Gil Crosthwaite, CRA commissioner, said. All departments planning to enter the league are asked to send representatives to the meeting. Eligibility, equipment, and schedules will be among topics covered.

The Convair "A" team and the Convair Eagles opened the season last Monday (April 13), unlimbering their bats for the first time in the La Mesa Invitational. The Convair "A" team is defending champion of the tourney.

Both teams have been entered in the San Diego city tourney which starts April 27. Some openings for experienced players still remain. Players are asked to contact Gil Crosthwaite, ext. 1245, Plant 1, after 1 p.m.

IRC GOLF ENTRIES OPEN AT SD TODAY

Entries are now being taken at Convair SD for the annual San Diego Industrial Recreation Council's match play golf tourney which gets under way May 2.

Registration, which closes 5 p.m., April 24, can be made at employee services, Plants 1 and 2. Entry fee has been set at $3.50 for the tourney which will be played May 2 at Balboa municipal course and May 3, 9 and 10 at Torrey Pines.

Prizes will be given winners and runners-up in each flight at an awards dinner 6 p.m., May 10 at the El Morocco. Over 300 golfers representing 11 member firms of the IRC are expected to compete.

All participants are required to have established handicaps.

* * *

Over 140 golfers entered in the Yater Memorial tourney at Convair SD finished play last weekend, but results were not available at Convairiety press time. A listing of top winners will be forthcoming in the April 29 issue.

Ski Club to Meet At Gillespie Field

Members of the Convair SD Water Ski Club attending the first meeting of the season April 8 laid the groundwork for club activities.

Meeting dates were set for the first Tuesday of each month at the new CRA Clubhouse at Gillespie Field, T. E. Mathews, commissioner, reported. Weekend outings will be held at Gleason Point, south of the Bahia Motel in the Mission Bay area, until the beach at Tierra del Fuego is rebuilt.

Mathews said family rates for the entire season will remain at $5, with an additional small towing charge at the beach to cover fuel costs. Two boats, an inboard and outboard, are available.

On April 11-12, prospective new members enjoyed free skiing on Mission Bay.





HAMS AT WORK—Above: Convair SD Radio Club code and theory class, taught by instructor Ed Warns (in center) practices multiple key drill in specially rigged classroom. Below: Lester J. Huk (sitting) and J. B. Baker, club commissioner, try out the new Hallicrafter receiver and transmitter recently installed in the club's Harbor Drive headquarters.

Roses on Parade April 19 At Garden Club Exhibit

The Garden Club at Convair SD will stage its annual Rose Show this Sunday (April 19) in the Floral Assoc. Bldg., Balboa Park.

Doors of the show will be thrown open to the public from 1-5:30 p.m. Admission is free.

E. L. Zimmerman, commissioner, said entries will be taken from 8-11 a.m., with judging to follow immediately Spectators will view flowers entered in five divisions.

The bulk of competition will be centered in Division One, the rose category, where 28 separate classes are planned. They vary from single roses of varying colors to blends and three and six mixed roses. All roses entered must have been grown by exhibitors, Zimmerman said.

Division Two, arrangements, is divided into miniatures, small, medium, large and arrangements using wood (driftwood, tree roots, etc.) Dry arrangements only will be accepted.

If fresh flowers are added to driftwood they will be placed in one of the other classes, Zimmerman stated.

Division Three is for corsages while Four is solely for children's entries. It is divided into age groups, children 5-11, and 12-16.

Best of show (Division Five) awards will go to the following: best single rose, mixed, grandiflora, arrangement, child's arrangement, three roses, floribunda and corsage.

Entry blanks can be obtained at employee services, both plants.

SD Camera Club To Select Models

Camera Club members at Convair SD will select the models to represent them at the San Diego Photorama when they stage a potluck supper and model shoot April 26 at Cuyamaca state park.

Members, models and others interested will leave CRA's Pecan Park at 10 a.m. for the Cuyamaca location.

Entry blanks for the character and glamor models are now available from Camera Club members. Girls desiring additional information should contact Fred Vogler, ext. 538, or Bill Wallace, ext. 2394, both Plant 1.

Completed entry forms should be mailed to Gil Crosthwaite, employee services, mail zone 3-20.

Two Chess Rounds Now Being Played At CRA Clubhouse

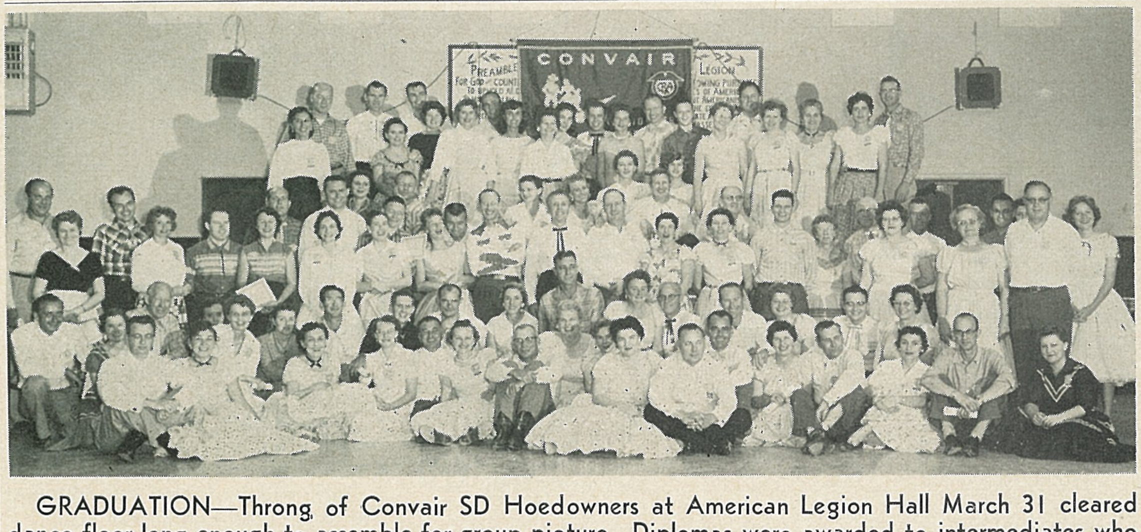
Sixteen chess players in two tourneys last week passed the halfway mark in round-robin competition at Convair SD.

In the Wednesday series Tom Lux has won four games and played one draw for top honors while William Thornton is currently ranked second with four wins and a single defeat.

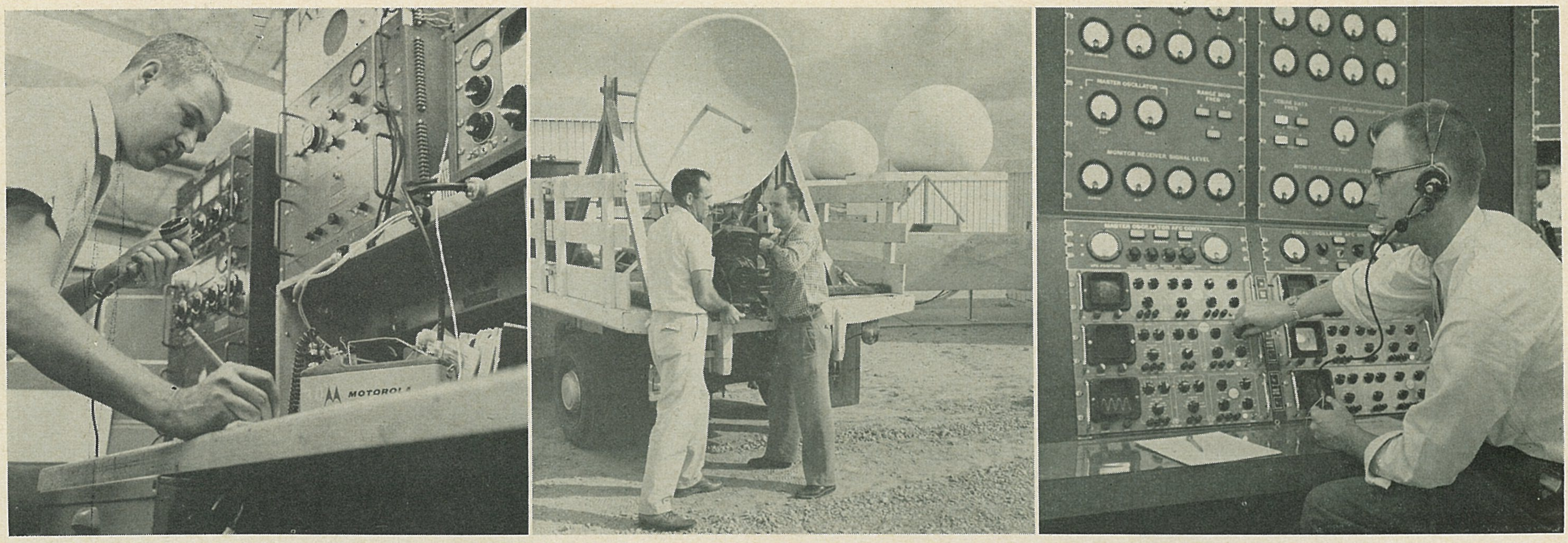
In Sunday play John Alexander, with a record of three victories and a draw, is ranked first and Brion Murphy, three wins and a loss, is runner-up.

The weekly competition, which is open to guests, is rated by the U. S. Chess Federation. The group meets every Wednesday in the CRA Clubhouse on Pacific Highway at 7:30 p.m.

Club members are laying plans for the annual Convair Championship Chess Tourney.



GRADUATION—Throng of Convair SD Hoedowners at American Legion Hall March 31 cleared dance floor long enough to assemble for group picture. Diplomas were awarded to intermediates who completed the 14-week course. Openings still exist in new beginners class which started April 6.



AZUSA MARK II—A pick-up truck driven through San Diego back country plays part of "missile" in testing improved tracking system developed by Astronautics. Center, L. C. Cusick and R. C. Hansen put aboard power unit. In background under plastic domes are some of antennas by which ground station keeps in touch. At left E. S. Carson operates radio link with truck, as well as small plane also used in tracking tests. At right is A. E. Hunt and control panel.

Engineers Hard Working, Less Creative in Soviet

The Soviet engineer works a 44-hour week at his regular job, puts in a lot of night work teaching or writing to supplement his salary, works constantly under great pressure and often dies in his 40s as a result.

These observations were among many made before members of the San Diego Section of the Society of Automotive Engineers recently by Secor D. Browne, assistant professor at M.I.T., recently returned from a trip to Russia.

"On the whole, Soviet engineers are less creative than their U. S. counterparts . . . and it is doubtful if the quality of their work is as good," Browne said. "Contrary to some current impressions in this country, the Soviet engineer is not '22 feet tall.' "

Browne, who speaks fluent Russian, last October arranged the exchange of technical and scientific literature between M.I.T. and the Russian Academy of Sciences, and during his trip visited libraries, universities and technical institutes in the USSR.

"The Soviet engineer works under terrific pressure," Browne asserted. "He goes either up or down, there is no in-between. A great percentage, unable to stand the tension, die in their late 40s, many from heart attacks and nervous disorders.

"The tension is applied as early as the elementary school. This is where the weeding out process takes place, based on the brightness of the student, the social position of his parents, and favorable standing in the eyes of the Communist party.

"The youth fortunate enough to attend the university (about one in ten) starts at age 17 and is graduated five years later," Browne said.

"The engineering graduate does not go to work in a factory," Browne said. "He usually joins the staff of institutes or academies run by the State. Design work is handled by the institutes; research and development is accomplished by the Academy of Sciences."

Many continue study for higher degrees. One, equivalent to our "master's" is attained somewhere around age 32, Browne said. Few doctorates are awarded, hardly ever before age 40.

"On the job, the engineer works 9 a.m.-6 p.m. week days, 9 a.m.-2 p.m. Saturdays. The majority must supplement their income, which they do by working nights —either on technical papers for publication or by teaching in universities.

"The starting monthly salary is 800 rubles (not quite enough to purchase a cheap suit). With a master's degree the salary increases an additional 500 rubles."

Browne said it is important to remember that income from papers published or from teaching can never surpass 50 per cent of the base pay. He said this spurs the engineer on to greater study in an attempt to get higher degrees, thus increasing his pay on both scales.

"Social life is almost non-existent. Because of limited acquaintances, chemical engineers marry chemical engineers, thermodynamicists marry thermodynamicists, etc., establishing a pattern that is rarely broken.

"This doubles the family income, naturally, but even then families are still crammed . . . sometimes as many as four families to an apartment.

"Because of the tendency to over-specialize, technical literature and information outside the engineer's specialty is not usually available to him. This cuts off an important source that could spark creative ideas.

"The majority of engineers are not party members, but this as a statistic is misleading," Browne said. "Before one can become a party member, years of study and toil, equivalent almost to that put in by an engineer in his field, must be accomplished. It is extremely difficult to get a 'degree' in both fields simultaneously," he said.



"By th' time I get all this small print read, it'll be payday and I won't NEED the loan!"

Azusa Mark II System Proved Out At San Diego by Truck and Plane

Convair Astronautics engineers and technicians have gathered together an unusual assortment of test "tools" for putting an advanced electronic system through its paces.

Included are two-way "walkie-talkie" radio units, a special mobile unit and an airborne system carried aloft via a single-engine aircraft.

The system under test is the Azusa Mark II.

Azusa Mark II is a highly refined and greatly improved version of the original Convair-developed system (Azusa Mark I) which has been used successfully with almost every ballistic missile launched from the Air Force Missile Test Center in Florida.

The Mark II is slated for installation at AFMTC this year.

Basically, the operating theory on both systems is the same. However, additions made in the Mark II enable it to produce more accurate data over greater range. Azusa consists of a network of antennas and ground based electronic equipment which "communicates" with an airborne transponder (receiver - transmitter) within the missile to give extremely accurate position and velocity data.

This information, fed into an IBM-709 computer and monitored by a plotting board, gives continuous predictions as to where the missile would impact, if power were shut off.

To date, such predictions have, on occasion, been so accurate aircraft have been able to position themselves down range to actually see a missile plunge into the ocean. In fact, the vast majority of missiles recovered after firings have been equipped with the Azusa system.

"Although now essentially operational, our Mark I system began as an experimental one," said L. G. Chase, electronics group engineer responsible for ground station development. "The Mark II has been developed as an operational system."

Three years ago Convair contracted with the Air Force to design and build the Mark II. While initial planning called for installation of the system at AFMTC, later directions specified Astronautics was to build, assemble and test the complete system at San Diego. Assembly began about the same time Astro moved into its new plant.

Mark II is installed near the southeast corner of the Astro reservation. The 10 antennas are positioned into two lines in the shape of a small cross.

"We are constantly expanding the Azusa application and might eventually involve it in most ballistic missile and space programs," said Lewis Emmerich of the Azusa project office.

Don Prim is the Azusa group engineer for development. Fabrication of many parts as well as assembly of the system fell to Dept. 756 with M. G. Williams as the immediate supervisor.

Testing has progressed with installation. To make exacting checks on the system's accuracy, a special mobile test unit has been devised. It consists of a transponder, antenna and special power plant which are hauled into the San Diego back country via pick-up truck. There it exchanges signals with the ground station.

"We can detect changes in target location with extreme accuracy," Prim said. "And from many miles away we can even detect small antenna movement caused by wind velocity and other factors."

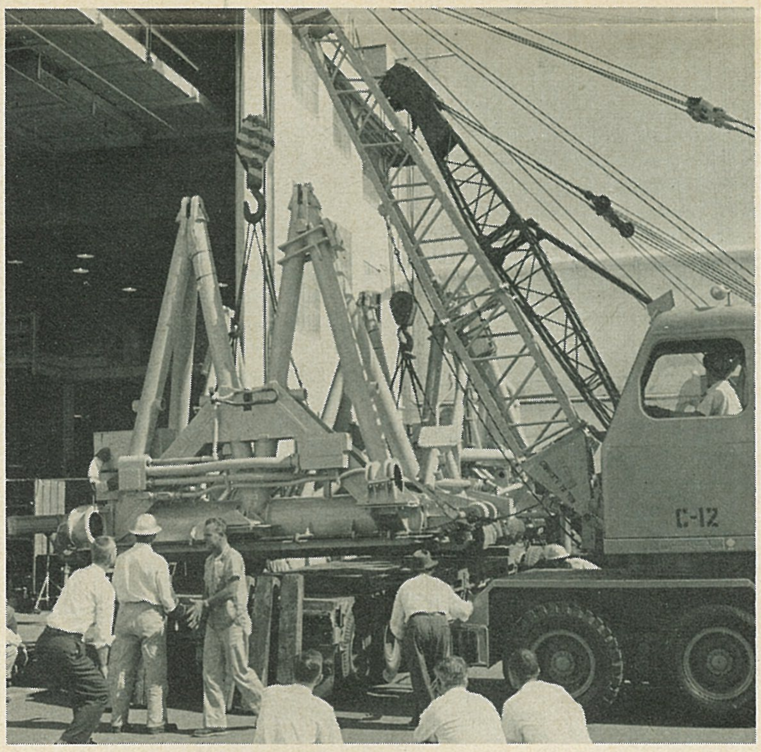
Control and communication to the remote station is through two-way radio equipment, with the truck carrying a unit of the "walkie-talkie" class.

A recent addition to the test program is a Cessna 182 aircraft, flown for Astro on contract by a local firm. Installed in the aircraft is a transponder similar to those placed aboard missiles.

This plane, transmitting signals as it goes, is flown to distant points to allow tracking by the ground station.

Work is now under way at AFMTC on the Mark II final installation site. Astro's plant engineering department is monitoring this work.

Once the AFMTC site is complete and testing finished at San Diego, the Mark II will be crated and shipped to Florida.



OFF TO VANDENBERG—Second missile launcher for Atlas ICBM built at Convair SD for Astronautics Division is swung onto low bed truck in preparation for trip to Vandenberg AFB. It was assembled there by Astro crew.

SD Division Building Launchers As Assist For Atlas Program

Convair SD Division is giving an assist to Astronautics Division under a contract to construct missile launchers for the Atlas ICBM.

First three units of the contract are being built in the Plant 1 experimental factory. Remaining number of the hold-down type launchers will be constructed at Plant 2.

First two of the 40-ton steel launchers were shipped last month by truck from SD Plant 1 to Vandenberg AFB where they were assembled by an Astronautics crew.

As a follow-on order SD Division also will build additional units and a static test article which will be tested this summer at the Point Loma test site.

The program task calls for design by Convair SD engineering and fabrication and tooling in Plant 2 departments under W. P. Woods, chief tool engineer at Plant 2.

A new department (Dept. 269) has been formed for missile launcher final assembly under L. F. Boring, general foreman. Boring will continue to be in charge of Model 8 final assembly. In the organization of the new department, S. S. Stearns has been assigned as foreman.

When assembly gets under way, probably by the first part of June, said Boring, there will be between 50 and 60 working in the department. Final assembly will be done in the C-D bay at the south end of Plant 2's Bldg. 3.

Fabrication and tooling work is now in progress in the northwest section of Bldg. 2 under already existing departments.

C-V CONVAIR

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Convairiety

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.

Tom Sullivan New Assistant Division Mgr.

Thomas J. Sullivan has been appointed assistant division manager-contracts, customer service, and material of Convair San Diego Division effective April 20, B. F. Coggan, Convair vice president and SD Division manager, announced.

Sullivan, who has had extensive experience in the material, customer service, and contracts fields, has transferred to Convair SD from Convair Fort Worth where he has been manager of contracts since 1951.



T. J. Sullivan

Reporting to the new assistant division manager will be C. G. Glasgow, manager of military contracts; D. H. Digges, manager of commercial contracts; J. J. Alkazin, manager of customer service; and B. P. Gibbons, manager of material.

Continuing to report to A. W. Morgan, assistant division manager-operations, will be works management of both Plants 1 and 2, plant engineering, quality control, and manufacturing development and process specifications departments.

A native of Franklin, N. H., Sullivan holds an A.B. degree from Holy Cross College and LL.B. degree from Harvard Law School. He is a member of the New Hampshire Bar and of the American Bar Association. He served in the U. S. Army Air Force during World War II.

He joined Convair Fort Worth in 1949 as a contract administrator. He became supervisor of contract administration in 1950 and manager of contracts the next year.

Sullivan's first impression upon arriving at Convair SD was gratification at the response of Convair people to the current cost reduction campaign.

"The tremendous response to the RX program shows a healthy understanding of the importance of low cost in today's highly competitive aircraft industry. Considering our fine technical capability, there is no question that the key to future success will be our ability to compete on the basis of low costs in all product areas," he commented.



PROMOTED—Pictured at General Dynamics Corporation headquarters in New York City are Frank Pace Jr., right, new chairman of the board, and Earl D. Johnson, now General Dynamics president. Pace remains corporation's chief executive officer. Election was announced late last week.

Pace Elected Chairman Of Board and Johnson Moves up to Presidency

Frank Pace Jr., president of General Dynamics Corporation, since May 1, 1957, late last week was elected chairman of the board of directors at the board's monthly meeting in New York City.

At the same time, directors named Earl D. Johnson, executive vice president, to succeed to the post of president.

Pace, who remains chief executive officer for the corporation, joined General Dynamics in May of 1953 as a director and executive vice president after a long career in public service. He succeeded the late John Jay Hopkins in the presidency.

Johnson came to General Dynamics as a director and senior vice president-operations and fiscal affairs in February, 1955, directly from the presidency of the Air Transport Association. He was named executive vice president May 1, 1957.

Also promoted by the board were:

Carleton Shugg, general manager of Electric Boat Division and a senior vice president of General Dynamics, becomes president of Electric Boat.

Dr. Frederic de Hoffman, general manager of General Atomic Division and a vice president of the corporation, becomes president of General Atomic and a senior vice president.

C. Rhoades MacBride, vice president-operations for the corporation, becomes senior vice president-operations.

Pomona's Payroll Climbs to 5,300 For All-Time High

Employment reached an all-time high last week at Convair Pomona, H. D. Filloon, manager of industrial relations and security, said.

At the middle of last week employment, which has been increasing steadily since mid-April last year, had reached 5,300—and was still climbing. A year ago approximately 4,487 people were employed by the Pomona Division, and at the beginning of this year the figure was approximately 4,900—a gain of over 800 for the year and of 400 since Jan. 1.

Employment reached a previous high in early 1957, when 5,205 persons were employed. With the outset of the business recession of mid-1957, employment at Pomona, as well as in all phases of the aircraft and missile industry, started dropping off, reaching a low point in April, 1958.

Since that time it has been climbing, slowly at first and gaining momentum in the early months of this year.

"We are still hiring competent and experienced machinists, machine operators, electronics technicians and electronics assemblers," W. W. Hoyt, manager of employment, said. "And our search for qualified engineers continues.

"In other fields professional and technical—hiring is slow and is mostly on a replacement basis," Hoyt continued.

ENGINEERS URGED TO TAKE CALIFORNIA STATE BOARD EXAM

B. F. Coggan, Convair vice president and SD Division manager, and three other Convair SD and Astronautics engineers have qualified recently as professional engineers certified by the California state board.

Besides Coggan, Ernest A. Hamilton and James E. Fithian of Dept. 547-3 of Astro, and R. H. Ridnour of SD Dept. 6 have received certificates signifying that they are registered as professional engineers in the state of California. They qualified by passing the last professional engineering examination.

Convair Divisions are encouraging the qualification of their engineers under state registration to raise the standards of engineering personnel, increasing the competence of the individual and the engineering departments, thereby adding prestige to individuals as well as Convair.

Of the more than 3,000 engineers in Convair SD and Astro Divisions less than five per cent are registered professional engineers.

The requirements for qualification, although basically calling for an engineering degree and two years' experience at a professional level, nevertheless give engineers who have no formal degree but a wide background an opportunity to prove their ability

(Continued on Page 2)

$12 Million Pay Boost Ahead For All Convair

A 3 per cent wage and salary increase affecting more than 62,000 Convair employees was announced last week.

It will mean a total of more than $12 million additional pay during the next year, R. H. Biron, Convair vice president-administration, said. Increases become effective at various intervals between now and Aug 3.

While the starting dates of the increased compensation in many cases are tied to contracts negotiated about a year ago with at least seven labor unions in Southern California and Texas, 16,866 non-represented hourly and flat-salary employees will receive the same percentage raises, Biron said.

In the San Diego area, where more than 37,600 Convair employees will be affected by the pay raises, the company's annual payroll will rise by $6,848,480, Biron said. An additional $390,000 a year in increased pay is in prospect for Convair San Diego employees working at such off-site bases as Palmdale, Edwards Air Force Base, and other locations.

In the Pomona area, where Convair produces Terrier and Tartar guided missiles for the U.S. Navy, the 3 per cent raises will account for $960,000 more income per year.

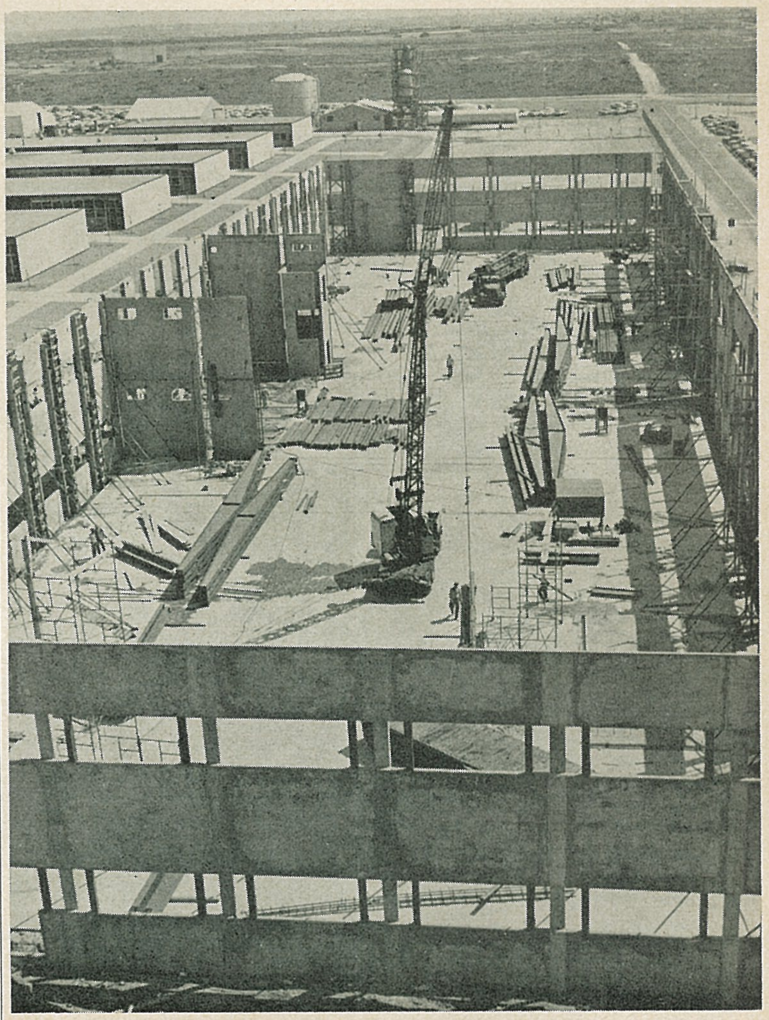
The raises became effective Monday (April 27) for 13,155 non-union salaried employees at San Diego, Fort Worth, Pomona and Astronautics.

May 4 will be the effective date for a total of 26,577 hourly employees. Of these, 22,928 are represented by International Association of Machinists unions at Astronautics and Convair SD, 18 by the Pattern Makers Association of Los Angeles and Vicinity at Convair SD and 75 by the United Welders Association of America at Astronautics.

Non-represented hourly workers at all divisions and General Offices also will receive the 3 per cent increase at that time.

On May 18, 10,262 hourly work-

(Continued on Page 2)



A BUILDING IS BORN—Ground was broken scarcely two months ago for new office building at Astro. This is scene as of early last week.

Two Tartar Destroyers For U.S. Navy Launched

Two destroyers, designed to carry Tartar missiles, were launched last week, one at Bay City, Mich. and the other at Seattle, Wash.

Press reports said the launchings were the first of a number of missile-armed destroyers ordered by the U. S. Navy. Both vessels are tagged for 1960 delivery.

The Henry B. Wilson, launched at the Defoe Shipbuilding Co. in Bay City, was described by Rear Adm. Edmund B. Taylor as "potentially the most powerful destroyer in the world," according to press reports. The 4,500-ton, 438-ft. Wilson has a beam of 47 feet and living quarters for 24 officers and 330 enlisted men. Defoe is reported working on three other missile-armed destroyers.

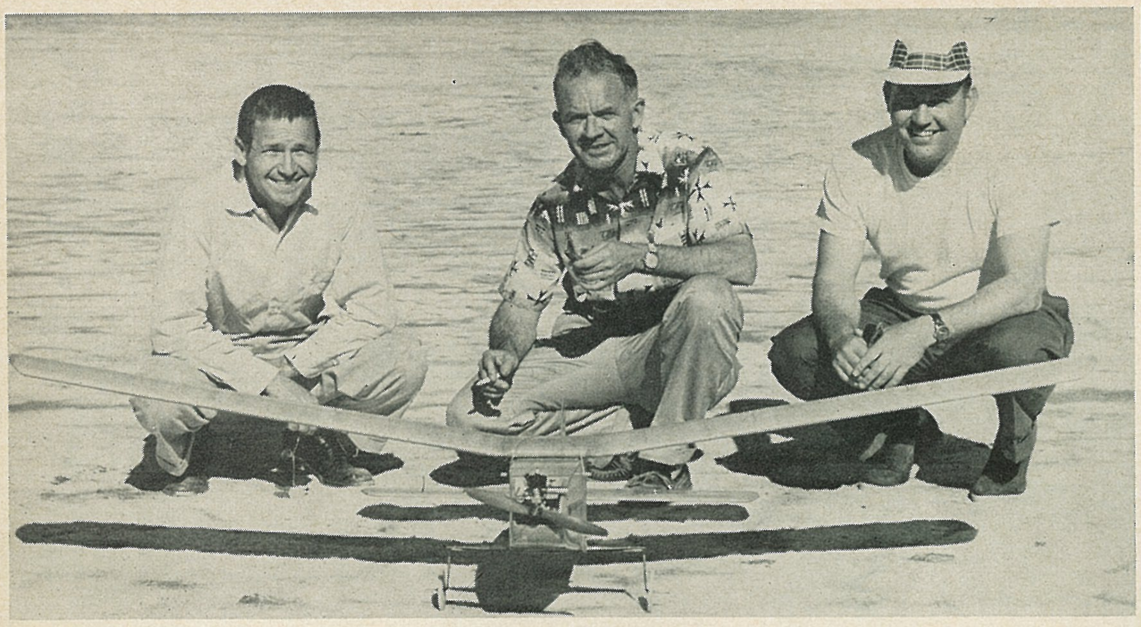
Mrs. Patrick J. Hurley, wife of a former Secretary of State and daughter of the admiral for whom the Wilson is named, christened the ship.

In Seattle the Todd Shipyards Corp., Seattle Division, launched the John H. Towers one day after the Wilson entered the water. Named for the late Admiral John H. Towers, famed Naval aviator, the ship was sponsored by his daughter, Mrs. Nathaniel Rotureau.

Both vessels are of the Charles Adams class and are half again as heavy as a World War II destroyer. Power plant counts 70,000 hp (equivalent of 28 Liberty ships) and speed is more than 30 knots. Todd Shipyards reported that the Towers will have an all-aluminum superstructure.

Primary armament is the Tartar, built at Convair Pomona. However, the vessels also will carry two five-inch, 54-caliber rapid firing weapons and four torpedo tubes.

Shortly after the Towers was launched, the keel was laid for the Buchanan, DDG-14 at Todd.



NEW RECORD—Convair Pomona's R. A. "Dick" Everett (Dept. 31), center, has another world record in model airplane flying. Radio-controlled plane shown here recently flew approximately 38 miles. At left is Bob Munson (Dept. 6) and at right is Capt. W. E. Burks, USAF. Both assisted in tracking flight.

World Model Plane Distance Record Shattered by 37-mile, 47 mph Flight

Dick Everett, Convair Pomona's internationally-recognized authority on model airplanes, has added still another honor to his endless string of records and championships.

This time he has—although it has not yet been officially recognized by Federation Aeronautique Internationale—set a new distance record for radio controlled model planes. Everett's new record is 37.1 miles. The old record was 8.61 miles.

The flight began in Daggett, Calif., and ended at a previously-selected spot near Ludlow on April 12. The plane traveled at a ground speed of about 47 miles per hour. Everett controlled the flight from the rear seat of a convertible.

The plane, which Everett designed and built, has a wing-spread of six-and-a-half feet, an over-all length of 51 inches and an empty weight of five-and-a-half pounds. The framework is built of balsa and plywood, the wings and tail are covered with silk, and the fuselage is covered with nylon. The plane is powered by a Torpedo 19 engine, and is controlled by a five-channel radio.

"The work involved in claiming a new record amounted to more time than was required to build the plane and make the flight," Everett said.

The "paper work" included filling out five sets of forms in triplicate, three sets of three-view drawings to metric scale, calculating the course flown in meters, using spherical trigonometry, and three pictures of the plane.

Model building and flying is more of an obsession than a hobby with Everett. He has set numerous national records, and has won more national, local, state and regional championships than he can remember. He has built and flown all types of models—gliders, radio controlled, free flight, etc.

Next week he will leave for Japan to conduct a clinic on "how to direct model aircraft contests" for hobby and craft directors of the Pacific Air Force, and also to serve as contest director for the PAF model championship meet. He will be in Japan, as a guest of the Air Force, for approximately 15 days.

This will be Everett's third trip to Japan for the armed forces in the past four years. His first trip was also for the Air Force, in 1956, when he conducted a model aircraft clinic and served as a contest director. In 1957 he visited Japan at the request of Armed Forces Far East to conduct a clinic and to teach a course in model building and contest direction to Hobby and Craft directors.

TRANSPORT SERVICE HOME IN BLDG. 51

Recent shifts of personnel in Bldgs. 5 and 51 as the renovation of the Convair SD engineering buildings swings into its final weeks saw 50 transport service people moving back home from the third floor of Bldg. 51.

They were finally able to occupy remodeled quarters in the west section of Bldg. 19 second floor where O. W. Harper's interceptor section of customer service has been rearranged.

Blueprint reproduction group is moving temporarily to the north end of the east mezzanine of Bldg. 5 while construction proceeds on the mechanical mezzanine sections for air handling equipment. Blueprint reproduction will eventually occupy the entire mezz when it is completed.

Subcontractor representatives from AVCO have taken up permanent quarters on the third floor of Bldg. 51. WIP stores have been moved from Bldg. 5 south mezzanine to the first floor of Bldg. 4 and the vendor vellums vault which contains vendor drawings of purchased parts for all models of Convair planes has been relocated on the second floor of Bldg. 4.

Convairiety's Mail Edition a Composite

Convair publishes five separate eight-page editions of Convairiety which serve locations where divisions or facilities are situated: San Diego, Pomona, and Antelope Valley, Calif., and Fort Worth, Texas.

The edition you are reading now, the "mail," is a composite of news edited from all the regular editions of the same date, with the sports and recreation pages eliminated. It is designed to give mail readers a broader report on what is happening within Convair than is possible with any one of the regular editions.

Convairiety strongly requests that mail readers report any incorrect addresses to the paper's main office, Bldg. 32, Convair, San Diego.

$12 Million Pay Increase Put in Effect

(Continued from Page 1)

ers represented by the IAM at Fort Worth, as well as 2,744 salaried and hourly employees in the Engineers and Architects Association bargaining unit at Astronautics and 15,454 in the same jurisdiction as SD Division will receive their 3 per cent increase.

The 2,081 hourly employees in the IAM union jurisdiction at Pomona will receive their 3 per cent raises, starting June 8, and on July 6, 73 Astronautics employees in the I.B.E.W. bargaining unit will receive their pay raises.

Fifty-two salaried and hourly employees at SD Division, represented by the International Alliance of Theatrical Stage Employees and Motion Picture Operators of the United States and Canada, will receive a 3 per cent raise, effective Aug. 3.

Biron said the raises will be reflected on the second paychecks issued after the effective dates for each union or non-union grouping of employees.

★ Convairiety ★

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Approximate current total circulation, over 65,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337.

Split Second B-58 Timing Feature of Firepower Flight

Split-second timing put a B-58 Hustler supersonic bomber screeching over the stands at precisely 11:41 a.m. April 15 at the World Congress of Flight in Las Vegas.

Lt. Col. A. W. Blizzard, project officer for the special mission performed by two B-58 crews of the B-58 Test Force at Carswell AF Base, said the Hustler in the aerial firepower demonstration was less than a half-second off its scheduled appearance over the stands.

"And that's a remarkable showing when you consider that the B-58 staged from a distance of 90 miles away," he commented upon his return to Carswell.

The firepower demonstration was piloted by Maj. E. E. Bradley Jr., while a similar run was piloted by Maj. K. K. Lewis before the public on April 12.

"We flew nine sorties in eight days—which also is an excellent record for aircraft in test phases," said Colonel Blizzard.

"Test force airmen and the seven Convair people who served as advisers are all to be commended for their fine work in making such a success of this project."

The B-58s on all flights were "reined-in" to less than the speed of sound to avoid complications which might have arisen if they had generated sonic booms, Colonel Blizzard said.

"This was on direct orders of USAF," he explained.

The Hustler flown by Major Bradley was on static display open to delegates and the public at the municipal airport in Las Vegas.

Other General Dynamics Corporation products on display at the Congress included the Atlas ICBM, the Terrier guided missile, the Convair 880 jetliner, and the Canadair 540 built by Canadair, Ltd., in Montreal, Canada.

Ceylon Professors Highly Impressed By B-58, FW Plant

Three engineering professors from the University of Ceylon were "highly impressed" after they took a look at Convair Fort Worth's supersonic B-58 and the plant's mammoth physical layout.

All three professors, under sponsorship of Texas A & M College, got the "royal tour" through the division. They've been in the United States since March 28 and are touring leading businesses and industries.

Their itinerary includes California, Texas, Colorado, Missouri, Illinois, Tennessee, Washington, D. C., Pennsylvania, Massachusetts, Montreal, Canada, and New York. They'll sail for England June 17.

"I've never seen anything like it," commented 33-year-old Dr. Kanapathypilly Argumugam, who lectures on civil engineering. Dr. Argumugam was educated in England and has special interests in hydraulics, hydro power and irrigation engineering.

The other tour members included Dr. Wilfred P. Jayasakara, 34, electricial engineering lecturer, and Dr. S. Mahlingam, 32, mechanical engineering lecturer. They also received their education in England.

Basic Electronics Class Graduated

Convair Fort Worth's educational services graduated its first basic electronics class yesterday.

The first 18 to complete the 480 hours of instruction have been attending class two nights a week for almost two years.

B. A. Kelly of Dept. 6-4 has been the group's instructor, and classes are being held at Tech High School.

Exams Urged For Engineers

(Continued from Page 1)

and become qualified professionals.

Before they can take professional engineers examinations, engineers must first pass the engineer-in-training exams. These can be attempted at any time after receiving a degree.

The examinations are given in San Diego at eight-month intervals with four months between the engineer-in-training and professional engineer examinations.

Registration is closed for the next examinations in August, but is open to anyone wishing to prepare for the spring exams. Application forms are available at educational services offices at both divisions. Information may be obtained through the office of the State Contractors License Board, AT-1-0427, or from C. G. Erickson, ext. 2324 at Astro site. Erickson is a member of the registration committee of the SD Section of the California Society of Professional Engineers.

Brig. Gen. Mundell Visits AV Facilities

Brig. Gen. Lewis L. Mundell, new commander of San Antonio Air Materiel Area, this month visited Convair facilities at Edwards Air Force Base and Air Force Plant 42, Palmdale.

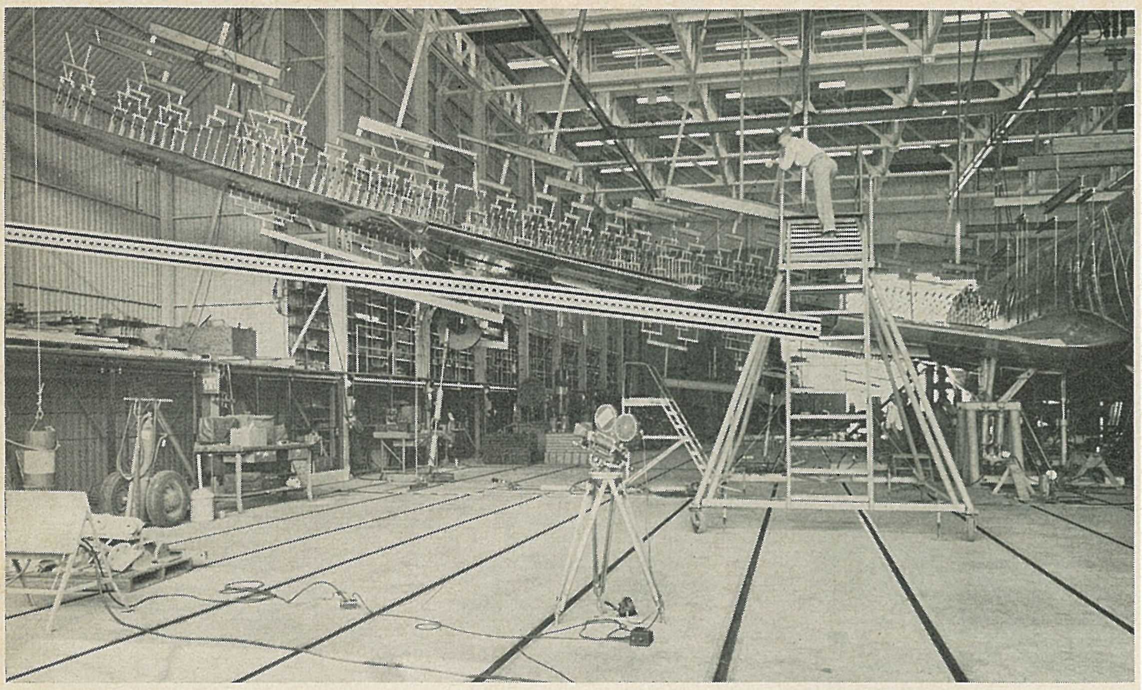
He inspected the F-106 Joint Test Force at Edwards on April 15 and later that day flew to Palmdale facility where he conferred with Convair officials. General Mundell was accompanied by Col. George E. Bostwick, Air Force plant representative at San Diego.

"STEVE CANYON" FLIES IN CONVAIR-BUILT JET

Lancaster's own Dean Fredericks, better known to TV fans as Steve Canyon, flew over the Mojave Desert in a Convair-built TF-102 during his recent visit to Edwards Air Force Base. He was piloted by Air Force Capt. Robert Rushworth.



STUDY ON SKATES—This photographic study of a boy on skates against a blurred background won first place in the latest quarterly contest sponsored by the CRA Camera Club. It was snapped by Edmund F. White (Dept. 61). The subject is his four-year-old son, Brad.



IN FLIGHT—Fuselage and wings of Convair's No. 2 880 under full load for first time at SD structures lab facility at seaplane ramp passed critical flight condition testing satisfactorily. Picture shows maximum upward deflection of wing tip, five feet above normal position (marked by artist's line). Adjusting jig fixtures is H. H. Runyan of Dept. 6, structures group.

Sam Keith Re-elected Head of Goodwill

Sam E. Keith of Convair Fort Worth was re-elected this month as president of Goodwill Industries, Inc., of Fort Worth.

Goodwill, an agency of the United Fund, provides employment for handicapped people.

880 Wing Bent Upward In Structural Testing

No. 2 Convair 880, now undergoing structural tests, passed its third major trial with flying colors this month.

Fully loaded for the first time to test out critical flight conditions, 880 No. 2 passed its critical wing bending, shear, and torsion tests "most saisfactorily," said W. E. Wise, group engineer in charge of the testing program at the seaplane ramp at San Diego.

Simulating a positive maneuver flight condition, in other words, a stall of the plane at approximately 40,000-ft. altitude and speed of Mach .89, a total load of 154,000 lbs. was applied to the plane. The plane was made "weightless," in effect, floating free in the hangar, with the whole plane lifted by means of the weight relief hydraulic system.

In the tests the wing tips were flexed upward to the maximum point—approximately five feet from the normal straight line position.

Complying with Federal Aviation Agency requirements to prove out the plane's capabilities at different gross weights and altitudes, the test was made with and without pressure. The full-load test was repeated the next night with the cabin fully pressurized with air, the test conducted by remote control. Results were observed by closed circuit television in the central control headquarters.

Eighteen test lab mechanics of Dept. 31 under Wyatt Ingram, assistant foreman of the day shift, and Connie Bley, night shift, support the engineers conducting the test program. They are responsible for construction, checking, and maintenance of all the physical hardware and installation of jig fabrication used to put different loads on the plane.

"Structural tests on the 880 have been running so smoothly that we are now six weeks ahead of schedule," commented Wise. "We are now nearly 60 per cent through the test program on Plane No. 2."

Next on the program is local testing of the horizontal tail, pods and pylons, fuel calibration, and completely-loaded fuselage tests in simulated landing conditions.

Long-Time Safety Mark Set by AF Samaritans

Convair C-131 "Samaritans," flying hospitals of the First Aeromedical Transport Group at Brooks AFB, Texas, have been credited with outstanding performance over a five-year period.

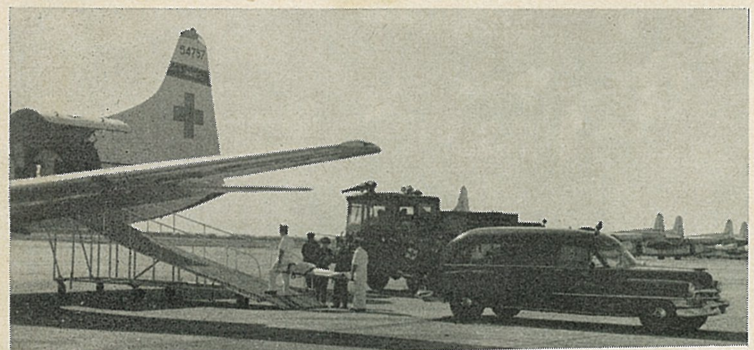
The Air Force outstanding unit award went to the 1st AMTG (MATS) this month for "exceptionally meritorious service" from Feb. 1, 1953 to Dec. 31, 1957.

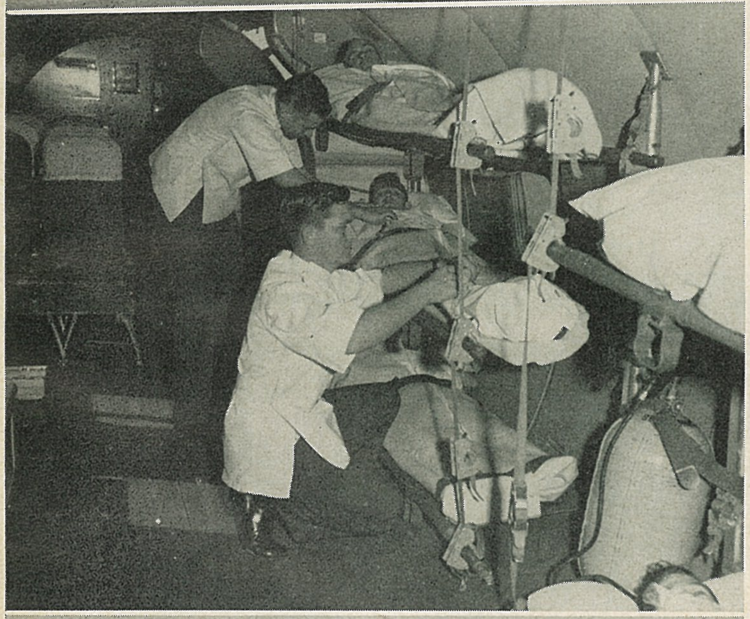
During this period, the Convair-built planes airlifted military patients to hospitals throughout the United States in all kinds of weather conditions and over hazardous areas without a single passenger or crew fatality.

More than 240,000 patient movements were completed without injury or loss of life by accident and over 200,000 flying hours were logged with but one minor accident.

In presenting the award to Col. L. B. Matthews, 1st AMTG Commander, Maj. Gen. R. L. Waldron, Commander Western Transport Air Force, Travis AFB, Calif., also commended the unit for developing improvements in the airborne iron lung for transport of polio patients.

The C-131 air evacuation transport is based on the Convair-Liner design with special facilities for carrying medical patients.







SAMARITANS IN ACTION—Convair C-131 "flying hospitals" have lived up to Convair-Liner's great record for safety and service. Above are scenes of First Aeromedical Transport Group personnel in action at Brooks AFB.

Research Lab To be Dedicated

Convair San Diego's $2-million high temperature structures research laboratory will be formally dedicated at a May 13 ceremony.

The modern testing facility, located at the seaplane ramp, includes a 100x200-ft. enclosed facility for structural tests on planes and plane sections, new office building, and outside testing area. The research facility was built by Convair to be used as an inter-division installation.

Invited to dedication ceremonies will be General Dynamics and Convair officials, SD Division management and engineering administrative personnel, and equipment manufacturers.

F-106s and F-102s to Take Part In Armed Forces Day Exhibits

Antelope Valley residents will have an opportunity to inspect the latest experiments and production aircraft, including Convair's F-102 and F-106 jet interceptors, at two open house events planned in observance of Armed Forces Day.

Static displays and fly-bys will be featured Saturday (May 16) at Air Force Plant 42, home of the Convair Palmdale facility, and on May 16 and 17 at Edwards Air Force Base, home of Convair Edwards facility.

At Palmdale Plant 42, static displays by tenant contractors will be arranged in the vicinity of the Air Force administration building on the south side of the field. Entrance to the area may be gained by way of 20th Street East, Ave. P or Ave Q. Plans for the day also include fire fighting and helicopter demonstrations.

Arrangements are being made by Plant 42 public relations subcommittee with R. B. Merwin chief of industrial relations, Palmdale, representing Convair.

Edwards Air Force Base will hold open house both Saturday and Sunday (May 16 and 17). Scientific demonstrations showing the research and development work at Edwards will be located in the huge maintenance and modification hangar, which covers an area the size of three football fields. The newest Air Force, Navy and Army weapon systems will be exhibited on the flight line.

Time schedules of fly-bys at both Palmdale and Edwards will be announced later.





ISOLATED—In top photo, C. F. Morris, right, of manufacturing research at Fort Worth and B. R. Proctor of Dept. 81-8 conduct test with piece of beryllium. "Space" suits are protective measure. Below, preparing to leave lab, they vacuum each other to pick up beryllium dust. Beryllium is under test by FW manufacturing research engineers for use in missiles and aircraft because of heat-resistant and high strength-to-weight characteristics.

'Space' Outfits Protect Special Metal Testers

Beryllium—the industry's latest glamour metal—is now undergoing a rigorous test series at Convair Fort Worth to determine how the precious metal may best be handled in the factory for use in the missiles and aircraft of the future.

As beryllium cannot be worked without special dust collecting equipment, the tests are being conducted in septically clean vacuumed room in the Dept. 81 area on the mezzanine.

The project is under contract with the Air Force and is designed to see how versatile this heat-resisting metal can be.

It's important for future Air Force use because of its heat-resistant characteristics and strength-to-weight ratio, manufacturing research engineers pointed out.

C. F. Morris of manufacturing research is conducting the tests with the help of B. R. Proctor of Dept. 81-8.

All precautions necessary to protect employees are being taken, according to Fred Temple, chief safety engineer, and Dr. J. K. Leverett, plant physician.

Morris and Proctor, who both underwent rigorous physicals prior to the project, wear a type of space outfit throughout the tests. Their uniforms, which include air line respirators, coveralls, rubber gloves and shoe covers, give them the appearance of Marsmen from outer space.

Inside the 8 by 8-foot test lab is a vacuum-type machine which collects beryllium dust particles in the air for later analysis.

Present testing has to do with how well the metal will bend at different temperatures. Engineers are also cutting into it with regular band saws.

An added safety feature on the band saw is a dust collector which gathers the metal particles at the point of the cut. Scraps and waste particles are carefully disposed of.

After the testing is over each day, Morris and Proctor run a vacuum cleaner type of apparatus over themselves, wash out the lab and change into another set of coveralls. They then change from the second set of coveralls back into street and work clothes after they leave the test room.

The beryllium sheet metal being tested costs around $300 per pound.



VISITORS—Over 50 San Diego school students, all exhibitors in city's annual Science Fair, were treated to tour of Convair SD and 880 test facilities recently.

Young Science Exhibitors See Test Facility

Young scientists had a close-up look at the Convair 880 jet transport the first of this month when SD Division played host to 58 exhibitors in the Fifth Annual Greater San Diego Science Fair.

R. H. Nall of SD educational services, as chairman of the Science Fair tours committee, arranged for the students to see the 880 test facilities at the seaplane ramp, supersonic wind tunnel, analog and digital computers as well as other points of interest within the plant. W. W. Lynt of SD military relations conducted the Convair SD tour and M. M. Saunders (Dept. 3-7) assisted.

* * *

Both of the sweepstakes winners of the 1959 Science Fair are the son and daughter of Convair SD parents.

Valerie Popp, 18, winning girl, is the daughter of C. J. Popp (Dept. 31) while top boy exhibitor, Paul Hixson, 17, is the son of D. I. Hixson of Dept. 6-31.

Valerie's project was entitled "A Quantitative Investigation of Molluscan Evolution," while Paul's was "An Aerodynamic Analysis; the Ring Billed Gull."

SD Team Wins IRC Table Tennis Meet

A table tennis team from Convair SD snagged first place in a tourney conducted by the Industrial Recreation Council this month.

The local entry won out over 12 teams, and edged a squad from Ryan in a special play-off game to take top honors. Trophies will be awarded May 6 at an IRC meeting at the Elks Club.

Team members are Lee "Chief" Majel (Dept. 171), Joe Brocamontez (Dept. 123), Ralph Cirillo (Dept. 272), and "Lucky" Sawamura (Dept. 6).

SHUFFLEBOARD GETS 50 ENTRIES IN DEPT.

J. W. Brett and Phil Estrada emerged as champs of the Dept. 180 shuffleboard tournament at Convair SD Plant 1. Runners-up were Lee House and Jim Halfacre. About 50 players took part in the department tourney with trophies awarded by CRA.

TOASTMASTERS CLUB PLANS LADIES' NIGHT

First Monday of each month has been designated "Ladies' Night" for Convair Toastmasters Club No. 457. Members will be joined by their ladies at the May 4 dinner meeting, 6 p.m., at the Astronautics executive dining room.

SD United Fund Gift Divided

San Diego's Community Chest will receive the lion's share of SD Division's Con-Trib-Club pledge of $175,000 to the 1959 United Fund.

The annual gift is paid quarterly.

A breakdown revealed this week that the San Diego Chest will receive $117,732 while $12,768 goes to Community Chests in other county communities.

They are: Carlsbad, $679; Chula Vista, $4,180; Coronado, $1,383; Fallbrook, $375; Oceanside, $2,820; Palomar United Fund, $1,937; Ramona, $176; Vista, $1,218.

Other philanthropic groups receiving pro-rated donations from Con-Trib funds for the fiscal year, September, 1958-1959, are City of Hope, $2,631; Hear Foundation, $426; Myasthenia Gravis, $527; Cystic Fibrosis, $283; Multiple Sclerosis, $1,287; National Recreation, $57.

San Diego Society for Retarded Children will get $1,251; San Diego Epilepsy Society, $876; Traffic Safety Council, $858; and United Cerebral Palsy, $3,304.

Donation to the American Red Cross is $33,000.

Allotment of Con-Trib's donation was approved by Employees' Committee.

Speedy Runners

Ancient Pastime of 'Coursing' Revived With 40-mph Whippets

A Convair SD man owns two of the fastest domesticated animals in existence.

Duke and Toby, a brace of pedigreed whippets, "stretch their legs" three times a week on the Mission Bay salt-beds, near metropolitan San Diego.

Owned by C. V. Hershberger of Convair SD, Dept. 15, the whippets zoom down the flats, sometimes reaching the astounding speed of 40 mph.

"In a 300-yd. dash they attain top speed the fastest and can outdistance any quarterhorse or racing greyhound, but on a longer course, their stamina would give way," Hershberger says.

Whippets are a pint-sized version of the racing greyhound. Unlike other hunting dogs, the whippet lopes along with head swinging back and forth, looking —not trying to pick up scent—for jackrabbits. Once the prey is spotted, Duke and Toby flash their vaunted speed. Working as a brace they close in on the frantic rabbit, with the final scene usually lost in a cloud of dust.

Coursing, as the sport is known, is not the popular pastime it was in previous centuries, Hershberger said.

Both whippets and coursing can be traced back to the days of ancient Egypt, through the Roman civilization and into medieval England, where, as the expression went, "no mean man" dared own a whippet.

But in the U.S. whippets became the "poor man's racehorse" and many a wager was laid on the outcome of a coursing event.

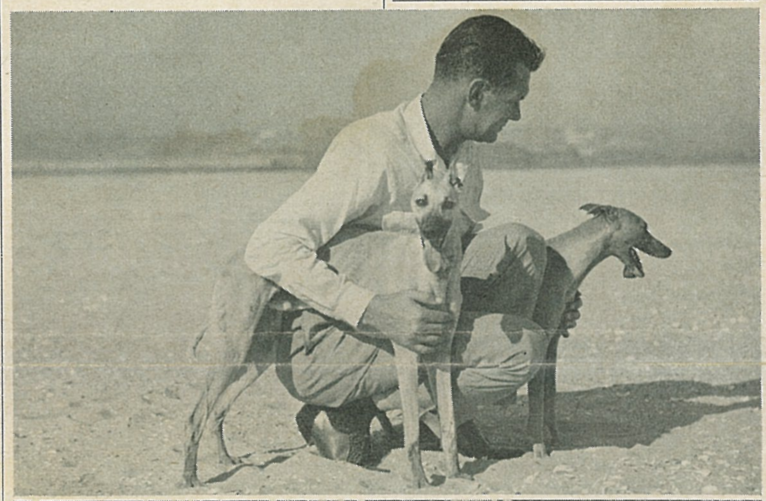
Hershberger, however, loves the sport for the sport's sake. He says Duke and Toby are excellent playmates for his two young children.

SD Man Co-Chairmans Management Meet

C. L. Terrel of Convair SD is serving as co-chairman of the Second Annual Southern California Management Conference May 7-8 at the Disneyland Hotel, Anaheim.

As president of the San Diego chapter of Society for the Advancement of Management, Terrel has been named to assist the general chairman, Vernon A. Metzger of Long Beach State College.

Terrel, staff consultant to assistant chief engineering administration at SD, will moderate the May 7 afternoon panel session on "Managerial Skills for a New Age." Convention theme is "Management in Transition."





SPEEDSTERS—Duke and Toby, a brace of pedigreed whippets, give their owner, C. V. Hershberger of Convair SD, a real "run for his money." They are able to attain a top speed of 40 mph.

Convair Man Assigned to Philippines Recalls Long War Years in POW Camp

A notation reading "9/3/41 to 2/28/45, Foreign Representative" on the company service record of Convair Pomona's George M. Messenger (Dept. 14) is probably one of the classic understatements of all time.

Messenger spent all except four of these 42 months as a "guest of the Japanese Emperor" in civilian internment camps in the Philippine Islands.

"I'm probably the only current Convair employee who earned most of his five-year service pin in jail," Messenger said. "Although six of us from Convair were in the Philippines at the time of the invasion, I believe that I am the only one now with the company."

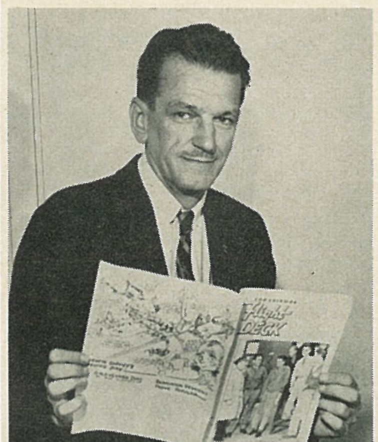
Messenger joined Convair Dec. 30, 1940, as a station manager and meteorologist for the flight delivery department, and a short time later became Atlantic Division Superintendent for the department. In September he was appointed station manager in Manila, and left the United States as radio operator on the first PBY to be delivered to the Free Dutch Air Forces. All deliveries to the Dutch were being made through Manila at the time.

He was in Manila when the Japanese bombed Pearl Harbor, and shortly afterward he became civilian engineer in charge of communications for Gen. Douglas MacArthur.

After MacArthur and certain members of his staff were ordered out of the Philippines, Messenger assisted with "mopping-up" measures in Manila, and on Jan. 2, 1942, he was taken prisoner by the Japanese. He was interned first at Santo Tomas Internment Camp, and later at Los Banos Internment Camp in Southern Luzon. He remained there until Feb. 23, 1945, when he was released as a result of one of the most dramatic actions of the war in the Pacific.

"There were over 2,000 of us in the camp, and although we received brutal treatment it was much better than the military prisoners received in other camps," Messenger recalled. "Food was our most serious problem, and toward the last we received only one inadequate meal per day."

The internees created their own democratic government and elected a committee to act as a governing body and to protest measures not in accordance with international regulations governing civilian internees. They also established an educational system—a number of college professors were among the internees—and taught courses of all kinds.



RETURNS — George Messenger, veteran Convair man who was captured while assigned to Philippines at outbreak of World War II, holds copy of "Flight Deck," old Consairway Division paper, which is among his mementos.

Messenger studied college-level courses in algebra, analytic geometry, differential and integral calculus, statistics, dynamics, strength of materials and introductory courses in civil engineering and magnetics. He taught courses in radio communications and meteorology.

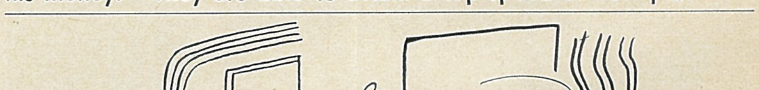
"We did everything we could think of to keep our minds occupied and to make time pass more quickly," he said.

"Our release was very spectacular. At 7 a.m. we were lined up for roll call and the Jap soldiers were in formation for calisthenics. American troop planes flew overhead, and as the first parachute trooper dropped, Rangers and guerrillas, who had surrounded the camp in secrecy, opened fire. It was all over in 15 minutes. Amtracks rolled up to the hospital to evacuate the sick and wounded, and four hours later all 2,100 of us were safe."

A few days—and several spools of red tape in obtaining transportation—later, the five Convair men were re-united with their families in the U. S. One of the six had died in a bombing attack on Corregidor.

After his return, Messenger became a navigator and later supervisor of training and navigation for the Consairway Division. He terminated when the Consairway contract was cancelled by the Air Transport Command.

Before rejoining Convair last August he was vice president of International Aircraft Maintenance Company.

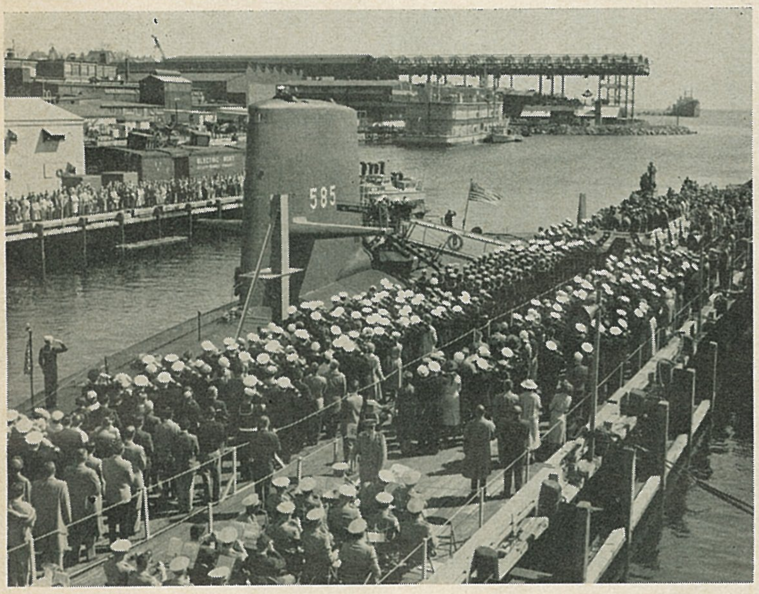


"Our driver took th' new freeway that got us here twenty minutes sooner, but it took another THIRTY minutes to pry his hands off th' steerin' wheel!"

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.



FASTEST—Stars and stripes go up on stern of nuclear powered Skipjack, world's fastest, at commissioning April 15 at Groton, Conn., shipyard of Electric Boat Division.

Skipjack Joins Fleet, Fastest, Deadliest Sub

GROTON—USS Skipjack, the world's fastest and deadliest nuclear submarine, became a unit of the U. S. Navy during commissioning ceremonies at Electric Boat Division here.

Before an audience of more than 2,000 the whale-shaped attack submarine was accepted into the fleet by Rear Adm. Chester C. Wood, commandant of the Third Naval District. Cdr. W. W. Behrens Jr. assumed command of Skipjack and ordered her colors hoisted.

Principal speaker during the ceremonies was Adm. James S. Russell, Vice Chief of Naval Operations, who termed Skipjack "the forerunner of a new generation of submarines."

"The combination of nuclear propulsion and streamlined hull gives her the greatest submarine performance of any ship in the fleet today," Admiral Russell declared. "She is controlled by a single man sitting at controls similar to aircraft controls. Her phenomenal speed and great maneuverability make her especially suited for carrying out her mission of attack."

Admiral Russell cited the builder, General Dynamics, for "the many outstanding contributions it has made in the development of submarines" and termed Skipjack the "latest creation of the engineering skill, dynamic imagination and productive know-how of the shipbuilders of Groton."

Earl D. Johnson, executive vice president of General Dynamics, turned the submarine over to the Navy, noting that Skipjack "has gone faster and deeper than any other submarine in the world. We know she has done what men only dared dream submarines would do just a few short years ago."

PR Manager Named By General Atomic

SAN DIEGO — Douglas M. Fouquet has been appointed manager of public relations and advertising for General Atomic Division.

Fouquet has been associated with the U. S. atomic energy industry for several years in public relations, advertising, sales promotion, and marketing activities. At General Atomic, where he assumed his new duties on April 1, he will work directly with Everett R. Holles, director of communications and assistant to Dr. Frederic de Hoffmann, General Atomic manager.

Fouquet was graduated in 1951 from Harvard College and received his master's degree in business administration from Harvard Graduate School of Business Administration.

S-C Introducing New 'Stereo' 60

ROCHESTER—A new "Stereo 60" Control Amplifier, Model ASR-444, has been introduced by the Stromberg-Carlson Division.

The "Stereo 60" is a complete stereophonic amplifier and preamp, with each channel providing 30 watts of rated power, and with peak power handling capacity of 60 watts in each channel.



NATO ANNIVERSARY—Frank Pace Jr., left, board chairman of General Dynamics and head of American Council on NATO, took part in April 7 anniversary dinner this month observing 10th birthday of NATO. Others, from left, Gen. Lauris Norstad, supreme allied commander-Europe; Joseph M. A. Luns, foreign affairs minister for Netherlands; John W. Nason, president of American Foreign Policy Association.

540 Will Start Month Tour of South America

MONTREAL—A tour of South America by a Canadair-Convair 540 jet-prop transport, begins soon. The new Canadian aircraft will be demonstrated to airline operators, owners of executive aircraft, and military authorities.

The Canadair-Convair 540 is the jet-prop successor to the widely used Convair 240, 340, 440 series of piston-engined airliners of which more than 1,000 have been built.

The 540 has two Napier-Eland jet-prop engines which give it far higher speed, greater comfort, and much lower operating costs than its forerunners. It seats up to 58 passengers and flies at speeds up to 340 mph.

The South American tour of the 540 will last a month.

A similar tour of the United States and Western Canada began in March and a third 540 will tour Europe in June. The Canadian jet-prop, which is in production for the Royal Canadian Air Force, also was demonstrated at the World Congress of Flight at Las Vegas.

After flight trials early in the North American tour, Mohawk Airlines stated that the 540 improved block time by 10 to 15% over the carrier's Convair 240's on a five-stop round trip between Utica and Detroit. Allegheny Airlines were also impressed with the performance of the Canadair-Convair 540.

Canadair Announces Two Appointments

MONTREAL — Canadair announced two new appointments recently.

David W. H. Godfrey has joined the public relations department as assistant manager of information services. He has been assistant to the technical editor of The Aeroplane magazine in England.

Albert W. Yates, formerly of Fairchild Engine Division, has been appointed manager of military transport sales for Canadair. He attended Purdue University.

Fellowship Awarded To Stromberg Man

ROCHESTER — William J. Stolze, manager of the technical staff of the Electronics Division of Stromberg-Carlson, has been awarded an Alfred P. Sloan Fellowship in executive development, according to E. P. Brooks, dean of the School of Industrial Management at Massachusetts Institute of Technology.

Stolze is one of 45 outstanding young men throughout the country nominated by their companies and selected by M.I.T. for 12 months of study in depth of the fundamentals which underlie sound management action.

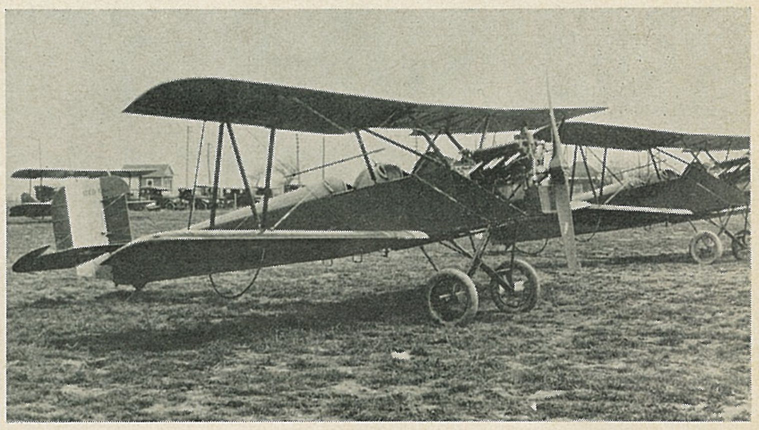
Microfilm Printer Rented by U.S. Navy

SAN DIEGO — Rental of an S-C 4020 High-Speed Microfilm Printer by the Navy, for delivery in 1959, has been announced by Stromberg-Carlson here.

The printer, designed for use with high-speed digital computers, will be installed at the David Taylor Model Basin, Carderock, Md. This equipment is capable of recording data on 35mm film at speeds up to 15,000 characters or 10,000 graph plotting points per second.



FIRST PRODUCT—A contract to build 20 TW-3 aircraft, such as this one, was first business obtained by newly formed Consolidated Aircraft in 1923.



FLEET OF 50—Competing against five other companies, Consolidated won design competition in 1923 for this PT-1, tandem trainer.

Newly-Formed Consolidated Acquires Contract For TW-3

(This is the seventh installment in a continuing history of Convair, based on research conducted by Howard O. Welty, now chief of editorial in Astronautics' communication department, and Nelson Fuller, manager of research and history, General Offices public relations.)

In 1923 Reuben H. Fleet set about forming his own aircraft company, Consolidated. He combined the assets of Gallaudet Aircraft of East Greenwich, R. I. with designs and engineering talent from Dayton-Wright Co. of Dayton, which was being dissolved as a subsidiary by General Motors.

From Dayton-Wright Fleet obtained the rights to all its plane designs, and the services of Col. Virginius E. Clark, the Dayton firm's chief design engineer since he resigned from the Air Service in 1921.

Clark was a Naval Academy graduate of 1907 who transferred to the Coast Artillery in 1909. Developing an interest in aviation, he was detached for duty with the Signal Corps and served with the 1st Aero Corps at North Island. Later he took advanced study in Massachusetts and won the first doctor's degree in aeronautical engineering conferred by M.I.T.

For Dayton-Wright, Clark designed the TA-3 and TW-3 primary trainers, notable for having fuselage structures of mild steel tubing, a material that proved to be rugged and reasonably cheap to fabricate.

Along with Clark and the Dayton-Wright designs, Fleet acquired an uncompleted contract for 20 TW-3 aircraft. He and Clark were to parlay an improvement of this design into the foolproof, Consolidated trainer that virtually every Army and Navy airman had for primary instruction between 1925 and 1935.

That same year (1923) the Army announced a competition for an improved primary trainer. Clark designed a simple biplane of tubular steel fuselage construction, having the cockpits arranged in tandem. (In the side-by-side TW-3 neither student nor instructor had been satisfied.) After tryouts in which five other companies competed at Brooks Field, San Antonio, Consolidated won a contract for 50 PT-1 trainers. Fleet's fledgling enterprise was strongly in business. The next move was to find quarters to fit the contract.



FOUNDER — Wartime photo shows Reuben Fleet in uniform. Leaving service in fall of 1922, he formed Consolidated in following year.

'Aviation No Amusement': Trotsky 'Great Instrument of Future'

The year of Consolidated's founding, 1923, found the U. S. Aviation industry at a low ebb. Things were different abroad. In England, airlines serving the Continent carried 45,531 passengers across the channel. In Russia, Minister of War Trotsky was quoted in Pravda: "Aviation is not an amusement, but the great instrument of the future."

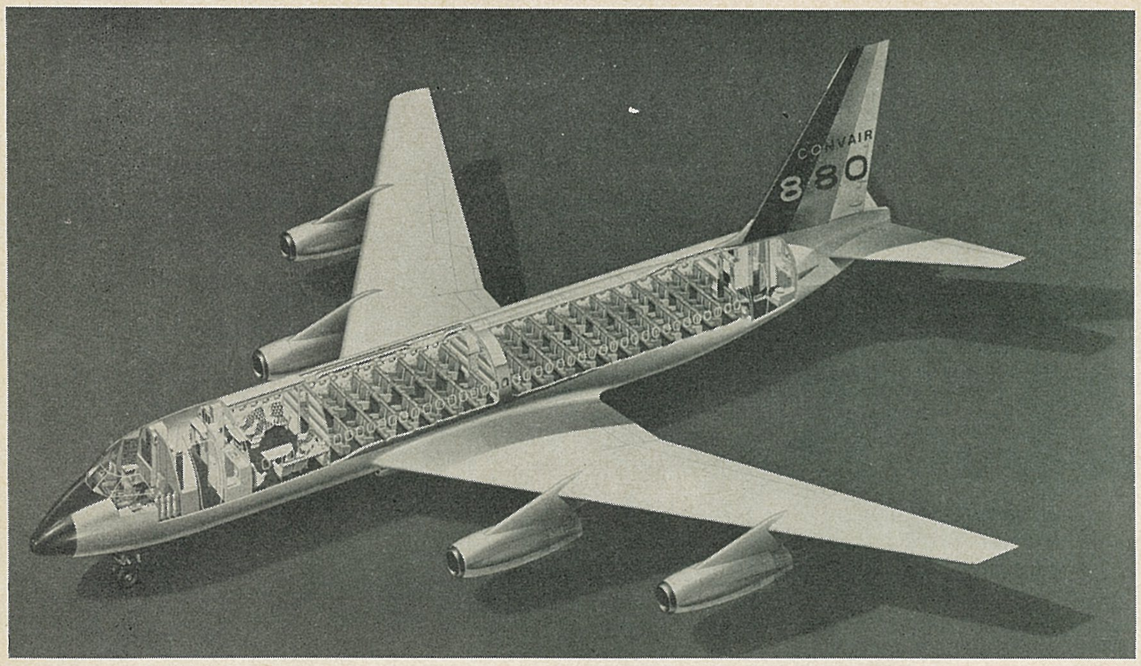
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U. S. Army airmen recall 1923 as the year of three proud achievements.

The continent was flown non-stop for the first time, May 2-3, New York to San Diego.

The first refueling aloft was accomplished June 25, also at San Diego.

On Sept. 5, Brig. Gen. Billy Mitchell's bombers sank the obsolete battleships Virginia and New Jersey in the last of that airman's historic challenges to established military thought.



INSIDE LOOK—Artist's drawing shows first-class and coach seating arrangements of Convair 880 jet transport. Club compartment seats are under contract to Chance Vought Aircraft, Inc. First-class seats are being built by National Seating Co.

Three Types of Jet Transports Slated For San Diego Mfg.

Slated as follow-ons to Convair SD's first jet transports now in production are sister ships, the Convair 600 and the intercontinental 880.

The intercontinental 880, which is due to go into airline service the fall of next year, is designed for a longer range than the basic 880 now undergoing flight testing. The structure has been modified to allow for a higher payload with the maximum takeoff gross weight to be approximately 20,000 pounds more than the basic 880. Design calls for minor structural changes to the wing. Fuel capacity will be increased to 13,870 gallons making possible such routes as from Brussels to Leopoldsville in Belgian Congo or New York to Copenhagen.

Both the intercontinental 880 and the 600 will be equipped with leading edge slats which will cut down the stalling speed to about 106 mph. Stall speed of the basic 880 is 113 mph. Cutting down the stalling speed will allow the transports to land in shorter distances, making possible use of shorter fields.

Airline companies which have already ordered the intercontinental 880 are Swissair and Scandinavian Airlines System, five planes; Transcontinental of Argentina, four; REAL-Aerovias of Brazil, four.

The basic 880 has been ordered by Trans World Air Lines, 30; Delta Air Lines, 10.

The intercontinental Convair 880 retains the basic 880's medium-range capability and economy and many features in common, including cruising speed of 615 miles an hour, faster than any of the other jet transports now being built. The Convair 600 will have a cruising speed of 635 mph.

Both 880s will be able to accommodate 110 passengers in the coach version, while the 600 will be able to carry 121 passengers in the coach version. In a first-class version the Convair 880 will carry 88 passengers in a four-across seating arrangement. Conversion to coach (five-across seating arrangement) can be made by an airline crew in four hours.

The Convair 880 is powered by four General Electric CJ-805-3 jet engines, commercial version of the military J-79 that powers the Convair B-58, advanced bomber now being built at Convair Fort Worth for the Air Force.

The 600 will be powered by four General Electric CJ-805-21 aft-fan jet engines equipped with thrust reversers.

The Convair jet airliners will have a first-line service life of from 10 to 20 years. Their speed and medium-range capability makes unlikely the possibility of their being succeeded by any other subsonic aircraft. And with the high cost of supersonic aircraft development, it is highly improbable, say aircraft officials, that they will be ready for commercial use within the next ten years.

Key Performance Data on Jet Transports

Specification Details and Performance Data

Performance			**Basic 880**	**Intercontinental 880**	**600**
Cruising speed			615 mph	615	635
Range	(Full first-class payload and normal reserves)		3450 statute miles	4210	4400
Maximum cruise altitude			40,000 feet	40,000	40,000
Rate of climb	(Sea level, normal power, takeoff weight)		3700 fpm	3140	3200
Fuel consumption	(30,000 feet, average cruise power)		1700 gal./hr.	1700	1700
Takeoff CAR runway	(Sea level standard conditions; 1,750-mile trip)		5200 feet	5500	5000
Landing CAR runway	(Sea level standard conditions; 1,750-mile trip)		5300 feet	4930	4650
Capacities	**880**	**600**			
Passengers	(Coach version 110)	(Coach version 121)	88	88	96
Payload	(Coach version 26,780 pounds)	(Coach version 29,245 pounds)	23,150 pounds	23,150	25,120
Fuel			10,770 gallons	13,870	15,110
Oil			28 gallons	28	28
Cargo capacity			863 cubic feet	863	928
Dimensions					
Overall wing span			120 feet	120	120
Wing area			2000 square feet	2000	2250
Overall length			129 feet, 4 inches	129 ft., 4 in.	139 ft., 5 in.
Height over tail			36 feet, 4 inches	36 ft., 4 in.	39 ft., 6 in.
Weights					
Maximum landing gross weight			132,800 pounds	155,000	180,000
Maximum takeoff gross weight			184,500 pounds	203,400	238,200
Maximum ramp weight			185,000 pounds	204,000	239,000
Maximum zero fuel weight			117,000 pounds	126,000	149,000

Engines

880: Four General Electric CJ-805-3 jet engines, equipped with silencers and thrust reversers.

600: Four General Electric CJ-805-21 aft-fan jet engines equipped with thrust reversers.

Seats For 880 Club Compartment Will be Built by Chance Vought

A contract to build the club compartment seats for the first Convair 880s has been awarded Chance Vought Aircraft, Inc., of Dallas, Texas.

The order, which totals more than $300,000, includes seats for the first 40 planes, 10 for Delta Air Lines and 30 for TWA. Each club compartment contains 12 seats.

The seats, of reinforced fiber glass, are made of an inner and outer shell filled with foam plastic for extra rigidity and strength. They will be of a contoured design to complement the modern fittings of the Convair jet transport.

Basic color is snowshoe white with upholstery to be of the color scheme of each airline.

First class passenger seats for the large passenger compartments are being built by National Seating Co., Mansfield, Ohio.

Club compartment seats for plane No. 4, first plane to be fitted with seats, were due in San Diego some time this month. First passenger seats for the plane will arrive this summer.



PANELIST—R. C. Sebold, Convair vice president-engineering (center), was among experts quizzed this month at a "Meet Aviation Press" panel in New York City. General topic was "supersonic transport." Sebold said he was confident that "when we can finance a supersonic transport, we can build it."

AF Team Briefed On Cargo Version

Proposed cargo version of the Convair 600 jet transport was under consideration by a team of Air Force officers at Convair San Diego Plant 1 last week (April 23-25).

Heading the group of 28 AF men were Col. K. S. Wilson of ARDC Detachment 1 of Wright-Patterson AFB, Dayton, Ohio, chairman; and co-chairmen, Lt. Col. W. A. Harmon of the transport weapon system project office at Wright-Patterson and Col. H. C. Wilder from MATS Hdqtrs., Scott AFB.

Presentation was under the direction of D. H. Digges, in charge of the Convair jet transport program, and H. J. Richardson, chief of AF requirements, SD military relations.

Private Pilot Dies in Crash

Killed in a plane crash in Mexico April 11 was a Convair Fort Worth man who was serving as a private plane pilot on a weekend religious mission to Central Mexico.

He was Frederick M. Weaver, 34, an electronics technician in Dept. 93.

Also killed in the crash was his passenger, the Rev. Harvey E. Flowers, pastor of Revival Temple in Fort Worth.

Weaver was flying a Stinson through rain and fog and trying to follow the Laredo-Monterrey highway when the craft crashed into a mountain 40 miles north of Monterrey, Mexico.

Weaver is survived by his wife; a daughter, Linda Weaver, 15; and his parents.

DR. JAMES RYAN OF ASTRONAUTICS MEDICAL FELLOW

Election of Dr. James Ryan, Astronautics chief physician, as a fellow of the Industrial Medical Association has been announced.



Dr. James Ryan

Dr. Ryan was to receive his fellowship certificate today (April 29) at the annual meeting of the association at the Hotel Sherman, Chicago.

In announcing Dr. Ryan's election, Dr. H. W. Lawrence, association president, specified the honor was being bestowed as "recognition for outstanding work in the field of industrial medicine."

A graduate of St. Louis University School of Medicine (1940), Dr. Ryan has been with Convair since August, 1951, first as a staff physician at Convair San Diego, then as Astro's chief physician, beginning in September, 1956.

Astro Man Elected By Welding Society

Robert L. Hawkins, Astronautics factory process engineer (Dept. 758), has been elected first president of the San Diego Section, American Welding Society, Inc.

The recently-organized group has a charter membership of 89 persons interested in promoting the art and science of welding. One of the aims of the group will be to emphasize youth education.

General Office Badges Changed

General Offices salaried personnel were wearing new badges this month.

They are a white field with blue stripes slanted across the upper half. The lower half of the plate, plain white, carries the individual's name and title or group designation.

Staff executives (defined as those reporting directly to General Offices executives) continue to wear badges with a blue field marked by a horizontal red stripe. Both types of badges entitle the holders to full entrance privilege to all Convair-owned and Convair-operated property, subject to local security regulations.



". . . and if you get thirsty during the night, just turn this."

C-V CONVAIR

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Convairiety

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San Diego EDITION

(Serving San Diego Division of Convair)

SD Division news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.

Larry Lawson, Lee Shipstead Seeking Office

The "political season" got off to a rousing start April 15 when the Convair SD Management Club held its annual nomination night in a carnival atmosphere at the Balboa Park Club.

This year's candidates for the presidency are L. G. "Larry" Lawson (Dept. 188-1) and S. L. "Lee" Shipstead (Dept. 192-1).

Barkers in derby hats and swinging canes attracted hundreds of members to the "midway" while a Dixieland band blew loud and strong to set the stage for the nomination roll-call that followed.

Thirty-two candidates vying for six offices and Board of Control posts were introduced by R. E. Elo, chairman of the nominating committee.

Shipstead ran for the presidency last year. He was defeated in a close race by the present officeholder, Ed Caldwell. Lawson is concluding a one-year term on the club's Board of Control.

Also sharing the spotlight at the meeting was the presentation of four MacSave-it awards. They went to E. E. Day (Dept. 223), C. W. Clark (Dept. 143), R. W. Shaffer (formerly in Dept. 15-1, now at Astronautics), and B. J. Wood (Dept. 93-0). Total saving to the company through these Cost Improvement Proposals was slightly over $375,000.

In the running for office of


Larry Lawson


Lee Shipstead

first vice president are T. H. Chadwick (Dept. 6), P. A. Hamm (Dept. 8-3), and S. S. Stearns (Dept. 267).

Four candidates were announced for the second vice presidency. They are C. F. McMenamy (Dept. 6), G. H. Wilson (Dept. 231), H. E. Wolfe (Dept. 15-1) and M. L. Sweeney (Dept. 292). Sweeney was nominated from the floor.

The office of secretary will be filled by either J. L. Busby (Dept. 8-2), J. S. Williams (Dept. 400-1) or B. J. Wood (Dept. 93-0). Ei-

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President's Award Slated For May 13

Convair President J. V. Naish will present the annual President's Award for Convair San Diego Division at the May 13 meeting of the SD Management Club.

The award goes yearly to the flat-salaried man in each division who has done the most to further cost reduction activities within Convair.

"Cost Reduction Suggestions" will be discussed by August C. Esenwein, Convair executive vice president, in his first address to the San Diego club.

In the running for the 1958 President's Award are 19 Convair SD candidates, each with well over the $25,000 minimum CIP dollar savings to his credit.

The winner will receive an individual bronze plaque and a $250 merchandise gift of his own choice. His name also will be engraved on a perpetual plaque in the division manager's office.

Those who have qualified for

(Continued on Page 2)



COUSINS ARE COMING—Mae C. Day of SD Dept. 8-6 poses with opening poster in series that will feature Connie MacSave-it's "cousins," each one pointing up a different phase of cost reduction. New posters will go up in plants every week.

Pace Elected Chairman Of Board and Johnson Moves up to Presidency

Frank Pace Jr., president of General Dynamics Corporation, since May 1, 1957, late last week was elected chairman of the board of directors at the board's monthly meeting in New York City.

At the same time, directors named Earl D. Johnson, executive vice president, to succeed to the post of president.

Pace, who remains chief executive officer for the corporation, joined General Dynamics in May of 1953 as a director and executive vice president after a long career in public service. He succeeded the late John Jay Hopkins in the presidency.

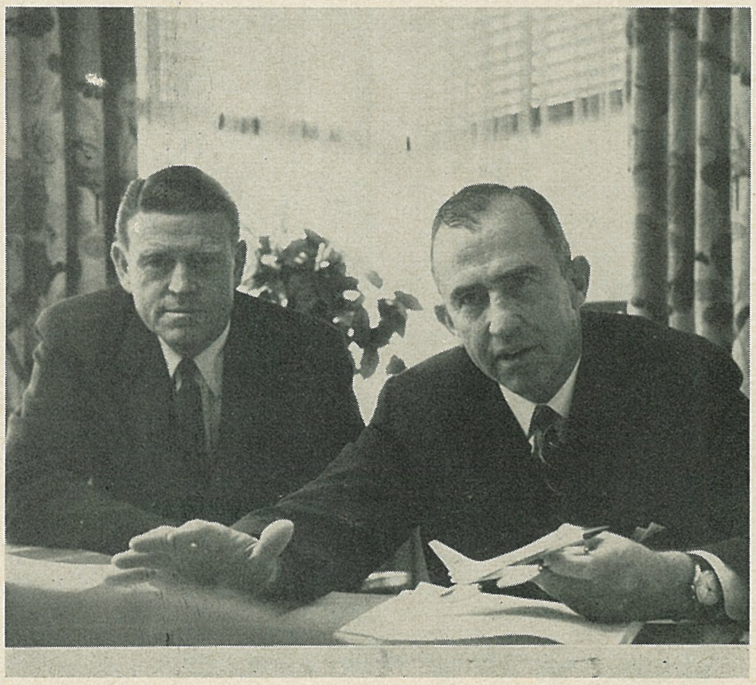
Johnson came to General Dynamics as a director and senior vice president-operations and fiscal affairs in February, 1955, directly from the presidency of the Air Transport Association. He was named executive vice president May 1, 1957.

Also promoted by the board were:

Carleton Shugg, general manager of Electric Boat Division and a senior vice president of General Dynamics, becomes president of Electric Boat.

Dr. Frederic de Hoffman, general manager of General Atomic Division and a vice president of the corporation, becomes president of General Atomic and a senior vice president.

C. Rhoades MacBride, vice president-operations for the corporation, becomes senior vice president-operations.



PROMOTED—Pictured at General Dynamics Corporation headquarters in New York City are Frank Pace Jr., right, new chairman of the board, and Earl D. Johnson, now General Dynamics president. Pace remains corporation's chief executive officer. Election was announced late last week.

RX Idea Flow Continues High, Savings Gain

Receipts of RX ideas are continuing at a rate of nearly 200 a day. Ultimate cost reduction as a result of RX during the first month of the campaign is expected conservatively to reach a half-million dollars.

"I am exceedingly pleased with the continued flow of fresh ideas," B. F. Coggan, San Diego Division manager, said. "Keep this 'fountain head' of new ideas flowing."

Coggan said that due to the tremendous response, it probably will be the latter part of May before the April winners of the $1,000 and $500 runner-up awards can be determined.

"Although our cost analysts are expediting all cases, naturally the more complicated suggestions take time to evaluate, to find out just how beneficial they will be to our cost reduction program. We are moving with speed, but also with care so as not to overlook any possible development of an idea."

Every RX idea submitted is being acknowledged by a personal letter to the author's home. However, Coggan reported that a few such letters have been returned marked "wrong address."

"Anyone who has submitted an RX idea and failed to receive an acknowledgment within a week can be sure that his address as listed in our personnel files is incorrect."

Coggan indicated that it is too soon to expect accurate figures on the amount of savings thus far in the four-month drive (now one month old), though he is confident that the dollar benefits are already of "considerable magnitude."

"Using as a rough rule of thumb the ratio of savings achieved in the past by, say 2,000 ESs and CIPs, I think we can predict conservatively that cost reduction thus far is in the neighborhood of a half-million dollars!"

Coggan complimented all departments on their cooperative attitudes toward analysts researching RX suggestions.

"Incidentally, the wide range of ideas I have received has considerably broadened the scope of our normal cost reduction efforts. Your suggestions have gone into many fields neglected in the past as a possible source for savings."

Coggan is spending two to three hours each evening, reading and postscripting each suggestion.

"I'm counting 'RXs' at night instead of sheep, but I'm willing to keep up this pace if you are willing to keep sending in the ideas," Coggan said.

SD SUGGESTION BOX 'OUT' FOR DURATION OF RX CAMPAIGN

It's amazing, but some people didn't get the word on the RX campaign.

Cost reduction ideas are still turning up in the suggestion boxes!

PLEASE! DON'T USE SUGGESTION BOXES!

The regular Employee Suggestion and Cost Improvement Proposal collection system has been suspended for the duration of the RX campaign. In its place, Division Manager B. F. Coggan wants all cost reduction ideas sent directly to him. Write out your cost reduction ideas and place them in the plant mail addressed to Coggan, Bldg. 1, Plant 1.

Write Project RX at the top.

A $1,000 and a $500 award will go to the best ideas sent in each month during the four month drive. In addition, all such ideas will be considered for Employee Suggestion awards, if the sender is eligible.

BIG BLOOD TURNOUT NEEDED TOMORROW

Convair SD hopes to put its blood supply credit back onto the right side of the ledger again after tomorrow's (April 30) collection.

Bloodmobile of the San Diego Blood Bank will be located at Plant 1 in the experimental area of Bldg. 5, Col. J-12, first floor, to receive donations from Depts. 6 and 31 between the hours of 10 a.m. and 2 p.m.

At least 250 pints are needed, said Ken Wulfemeyer of SD employee services, to wipe out the deficit and take care of the usual demand during the next couple of months. The supply now credited to SD Division is 60 pints overdrawn.

Tom Sullivan New Assistant Division Mgr.

Thomas J. Sullivan has been appointed assistant division manager-contracts, customer service, and material of Convair San Diego Division effective April 20, B. F. Coggan, Convair vice president and SD Division manager, announced.

Sullivan, who has had extensive experience in the material, customer service, and contracts fields, has transferred to Convair SD from Convair Fort Worth where he has been manager of contracts since 1951.


T. J. Sullivan

Reporting to the new assistant division manager will be C. G. Glasgow, manager of military contracts; D. H. Digges, manager of commercial contracts; J. J. Alkazin, manager of customer service; and B. P. Gibbons, manager of material.

Continuing to report to A. W. Morgan, assistant division manager-operations, will be works management of both Plants 1 and 2, plant engineering, quality control, and manufacturing development and process specifications departments.

A native of Franklin, N. H., Sullivan holds an A.B. degree from Holy Cross College and LL.B. degree from Harvard Law School. He is a member of the New Hampshire Bar and of the

(Continued on Page 2)

$12 Million Pay Boost Ahead For All Convair

A 3 per cent wage and salary increase affecting more than 62,000 Convair employees was announced last week.

It will mean a total of more than $12 million additional pay during the next year, R. H. Biron, Convair vice president-administration, said. Increases become effective at various intervals between now and Aug 3.

While the starting dates of the increased compensation in many cases are tied to contracts negotiated about a year ago with at least seven labor unions in Southern California and Texas, 16,866 non-represented hourly and flat-salary employees will receive the same percentage raises, Biron said.

In the San Diego area, where more than 37,600 Convair employees will be affected by the pay raises, the company's annual payroll will rise by $6,848,480, Biron said. An additional $390,000 a year in increased pay is in prospect for Convair San Diego employees working at such off-site bases as Palmdale, Edwards Air Force Base, and other locations.

In the Pomona area, where Convair produces Terrier and Tartar guided missiles for the U.S. Navy, the 3 per cent raises will account for $960,000 more income per year.

The raises became effective Monday (April 27) for 13,155 non-union salaried employees at San Diego, Fort Worth, Pomona and Astronautics.

May 4 will be the effective date for a total of 26,577 hourly employees. Of these, 22,928 are represented by International Association of Machinists unions at Astronautics and Convair SD, 18 by the Pattern Makers Association of Los Angeles and Vicinity at Convair SD and 75 by the United Welders Association of America at Astronautics.

Non-represented hourly workers at all divisions and General Offices also will receive the 3 per cent increase at that time.

On May 18, 10,262 hourly workers represented by the IAM at Fort Worth, as well as 2,744 salaried and hourly employees in the Engineers and Architects Association bargaining unit at Astronautics and 15,454 in the same jurisdiction at SD Division will receive their 3 per cent increase.

Fifty-two salaried and hourly employees at SD Division, represented by the International Alliance of Theatrical Stage Employees and Motion Picture Operators of the United States and Canada, will receive a 3 per cent raise, effective Aug. 3.

Biron said the raises will be reflected on the second paychecks issued after the effective dates for each union or non-union grouping of employees.

Larry Lawson, Lee Shipstead Seeking Office

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ther R. W. Dill (Dept. 5) or R. E. Trapp (Dept. 93-6) will win the nomination as treasurer.

Financial secretary candidates include D. K. Kerr (Dept. 91-0), E. W. Manning (Dept. 25-7) and M. "Mike" Alianelli (Dept. 223). Alianelli was nominated from the floor.

Members will elect four Board of Control members for one-year terms. Candidates are J. R. Chapin (Dept. 271), T. J. Flanagan (Dept. 91-0), W. J. Wood (Dept. 6-51), R. F. Greggs (Dept. 401), W. M. Holland (Dept. 216), T. R. King (Dept. 31) and C. W. Pharis (Dept. 31).

Two of the following men will be elected to two-year terms on the Board. They are J. G. Miller, (Dept. 188-3), N. R. Keough (Dept. 31), W. R. Kemper (Dept. 292-1), and R. D. Gowdy (Dept. 101).

One member will be elected to a three-year term on the Board. Candidates are G. M. Loudermilk (Dept. 266), C. W. Shoupe (Dept. 406) and G. B. Steed (Dept. 93-2).

Comedian Ken Card and four dancers supplied entertainment after the nominations. The program was sponsored by fabrication departments, Plants 1 and 2.

Sullivan Assistant Manager of Division

(Continued from Page 1)

American Bar Association. He served in the U. S. Army Air Force during World War II.

He joined Convair Fort Worth in 1949 as a contract administrator. He became supervisor of contract administration in 1950 and manager of contracts the next year.

Sullivan's first impression upon arriving at Convair SD was gratification at the response of Convair people to the current cost reduction campaign.

"The tremendous response to the RX program shows a healthy understanding of the importance of low cost in today's highly competitive aircraft industry. Considering our fine technical capability, there is no question that the key to future success will be our ability to compete on the basis of low costs in all product areas," he commented.

President's Award Slated For May 13

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the award are: Walter Bailey Jr., Dept. 600; G. K. Cox, Dept. 101; Carlos Constantino, Dept. 223; W. L. Colahan, formerly of SD Dept. 288, now of Astronautics; E. E. Day, Dept. 223; David Dietz of Palmdale Dept. 324; R. D. Foster of Palmdale Dept. 328; E. D. Fountain, Dept. 223; E. J. Hallam, Dept. 292; O. C. Jones, Palmdale Dept. 321; H. A. Kayes, Dept. 91; H. S. Murphy, Dept. 292; C. R. Ryan, Dept. 218; E. E. Rose and Kenneth Sinclair, both of Dept. 288; J. D. Saunders of Palmdale Dept. 328; A. H. Springer, Dept. 218; S. S. Stearns, Dept. 267; G. H. Wilson, Dept. 231.

J. G. Saftig of Dept. 230, one of the highest qualifiers in CIP savings during last year, was fatally injured last month in a light plane crash.

Bar Review Course Will Start May 10

Convair people who hold law degrees or are eligible to take the California Bar Association examinations to be given this fall are reminded that a new bar review course will start May 10.

The course will be given at the downtown campus of Cal Western University, 1729 Fifth Ave., SD. Details may be obtained from Hal Kennedy, GA-4-9245.

Hospital Bed Need Is Acute, Biron Asserts

Hospital beds in the San Diego area last year were 700 below the number considered by the U. S. Public Health Service as an absolute minimum (three beds per thousand population).

"And the shortage will continue to increase by about 100 a year as long as San Diego's population continues to boom," R. H. Biron, Convair vice president-administration, said this week, adding his weight to the Tri-Hospital Building Fund drive for which an in-plant campaign will be conducted at San Diego and Astronautics Divisions this summer, as well as in virtually all other San Diego industrial concerns.

"This is truly a dangerous community condition and affects every one of us," Biron continued. "The raising of funds to increase the bed capacity of Mercy, Scripps and Sharp hospitals by some 400 beds, therefore, becomes a personal problem."

Biron heads the industrial division of the building drive. J. V. Naish, Convair president, is a member of the drive's executive committee.

Even this will not completely cure the situation, however, for Biron added that a Hospital Council of San Diego survey indicates that despite all expansion plans for the next 10 years there will be a shortage of 400 acute-care beds in the county!

Here is what the three hospitals propose to do with the $10½ million which the drive aims at raising:

1. Mercy Hospital—100 additional beds; new maternity department; new children's department; diagnostic and treatment center for low-income groups; modernization of present facilities.

2. Scripps Memorial — Construction of a new structure which will add 125 beds and will include accommodations for maternity and pediatric patients. Also to be added will be special laboratories and other hospital facilities.

3. Sharp Memorial — Construction of 217 beds including a maternity wing with a 60-bed unit with net increase of 13 beds and net increase of 63 bassinets, remodeling for 22 beds and 3 nurseries, an acute bed wing of 132 beds and a chronic disease wing of 50 beds.

TRANSPORT SERVICE HOME IN BLDG. 51

Recent shifts of personnel in Bldgs. 5 and 51 as the renovation of the Convair SD engineering buildings swings into its final weeks saw 50 transport service people moving back home from the third floor of Bldg. 51.

They were finally able to occupy remodeled quarters in the west section of Bldg. 19 second floor where O. W. Harper's interceptor section of customer service has been rearranged.

Blueprint reproduction group is moving temporarily to the north end of the east mezzanine of Bldg. 5 while construction proceeds on the mechanical mezzanine sections for air handling equipment. Blueprint reproduction will eventually occupy the entire mezz when it is completed.

Subcontractor representatives from AVCO have taken up permanent quarters on the third floor of Bldg. 51. WIP stores have been moved from Bldg. 5 south mezzanine to the first floor of Bldg. 4 and the vendor vellums vault which contains vendor drawings of purchased parts for all models of Convair planes has been relocated on the second floor of Bldg. 4.



SCHOLARSHIPS—Convair SD Management Club scholarship committee and judges are shown with finalists in annual scholarship contest following April 15 judging. Top winners, Melanie Rohr and Fred Hunemuller, are pointed out by arrows.

Outstanding Students Chosen For SD Club's Scholarships

Melanie Rohr and Fred Hunemuller, both 18, have been named winners of the Convair SD Management Club's 12th annual scholarship contest.

They will each receive $1,000 in four payments of $250 each to assist them with continuing their education at the college or university of their choice.

Melanie is the daughter of two Convair SD parents, Alex Rohr of Dept. 600, Plant 2, and Virginia Rohr, Dept. 192-6 at Plant 1. Fred's father, Wilbert Hunemuller, was with Dept. 25-9 at the time the applications were submitted.

Both of this year's winners have had high scholastic records in high school and belong to the California Scholarship Federation, scholastic organization. Melanie, who will graduate in June from Rosary High School, has been editor of the yearbook and coeditor of the school paper. She plans to continue her study of mathematics and psychology at college.

Fred stands third scholastically in his senior class at San Diego High School. He is serving as president of the Student Council and is a member of the Quill and Scroll and German clubs. He plans to apply for entrance to M.I.T. or Cornell where he will major in science or mathematics.

Runners-up are Diane Monahan, Toby Kraus, Bruce Weber, and Gunter Amtmann, who will each receive a $100 Savings Bond.

Final choice was made after personal interviews April 15 with the club scholarship committee assisted in the selection by three qualified judges, Dr. Russell A. Beam of California Western University; H. L. Grosvenor, personnel director at Rohr Aircraft Corp.; and Mrs. Mary Wade, personnel manager at Marston's.

All of the winners and their parents will be introduced at the May 13 Management Club meeting.

Committee in charge of the 1959 contest was W. S. Nader, H. E. Mayer, M. L. Sweeney, T. F. McAleer, C. T. Boyle, and Louise Cathcart.

ENGINEERS URGED TO TAKE CALIFORNIA STATE BOARD EXAM

B. F. Coggan, Convair vice president and SD Division manager, and three other Convair SD and Astronautics engineers have qualified recently as professional engineers certified by the California state board.

Besides Coggan, Ernest A. Hamilton and James E. Fithian of Dept. 547-3 of Astro, and R. H. Ridnour of SD Dept. 6 have received certificates signifying that they are registered as professional engineers in the state of California. They qualified by passing the last professional engineering examination.

Convair Divisions are encouraging the qualification of their engineers under state registration to raise the standards of engineering personnel, increasing the competence of the individual and the engineering departments, thereby adding prestige to individuals as well as Convair.

Of the more than 3,000 engineers in Convair SD and Astro Divisions less than five per cent are registered professional engineers.

The requirements for qualification, although basically calling for an engineering degree and two years' experience at a professional level, nevertheless give engineers who have no formal degree but a wide background an opportunity to prove their ability and become qualified professionals.

Before they can take professional engineers examinations, engineers must first pass the engineer-in-training exams. These can be attempted at any time after receiving a degree.

The examinations are given in San Diego at eight-month intervals with four months between the engineer-in-training and professional engineer examinations.

Registration is closed for the next examinations in August, but is open to anyone wishing to prepare for the spring exams. Application forms are available at educational services offices at both divisions. Information may be obtained through the office of the State Contractors License Board, AT-1-0427, or from C. G. Erickson, ext. 2324 at Astro site. Erickson is a member of the registration committee of the SD Section of the California Society of Professional Engineers.

Technical Journals Offered For Free

Technical journals by the dozens may be had for the taking at Convair SD's engineering library, Col. 5D2, second floor Bldg. 5.

Keith Blair, chief librarian, said that all periodicals addressed to people no longer with the company are being gathered in the library's reading room for free distribution to anyone.

Available on a first-come, first-served basis are such journals as "Electronic Equipment Engineering," "Design News," "Applied Hydraulics and Pneumatics."

May 8 at 4 p.m. Deadline to Enter Padre Baseball Ticket Drawing

Entries for the second free drawing of Padre baseball tickets, sponsored by CRA at Convair SD, are now open. Deadline is May 8 at 4 p.m.

Tickets given away in the second drawing are good for Padre home games on May 16, 17, 22, 23, 24, 26 and 27. Each winner receives two tickets. To enter, merely write name, clock number, shift, department number, location and telephone number on a slip of paper and place in one of the boxes located at employee services, Plants 1 and 2; Rose Canyon: Dorothy Kniffen, Bldg. 2, ext. 2239; Fordham Street: Bessie Cooper, ext. 100; Gun Butts; field operations inspection office; Ramp: thermo laboratory. Only one entry per individual is allowed.

'RX'

★ Convairiety ★

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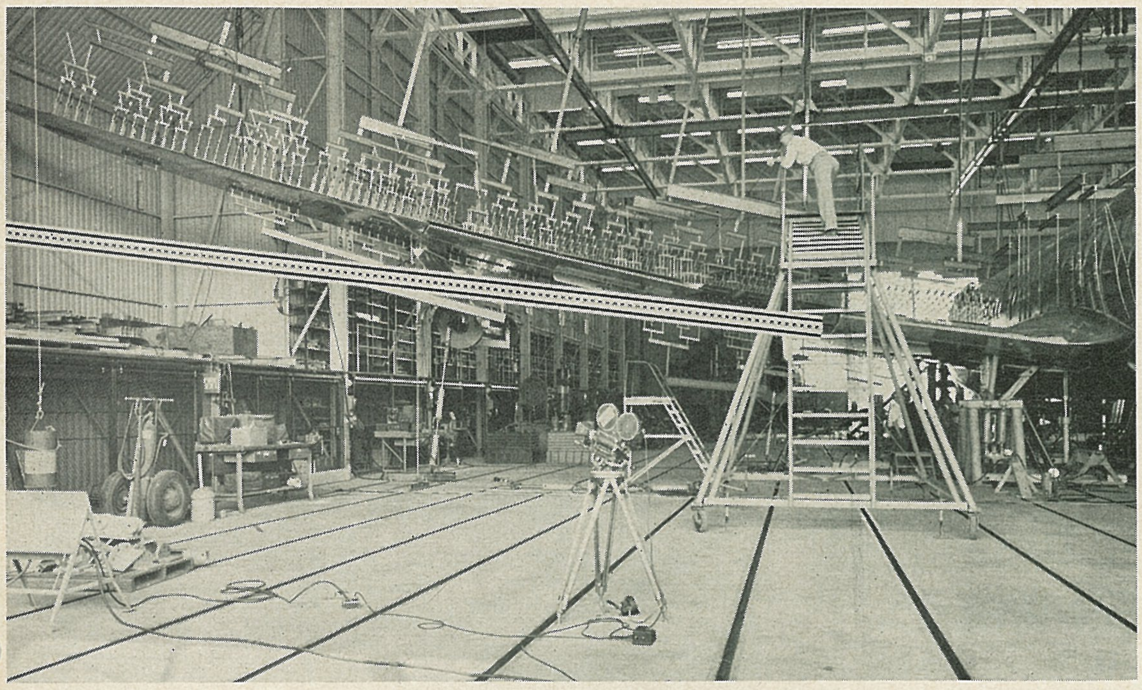
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



IN FLIGHT—Fuselage and wings of Convair's No. 2 880 under full load for first time at SD structures lab facility at seaplane ramp passed critical flight condition testing satisfactorily. Picture shows maximum upward deflection of wing tip, five feet above normal position (marked by artist's line). Adjusting jig fixtures is H. H. Runyan of Dept. 6, structures group.

Sam Keith Re-elected Head of Goodwill

Sam E. Keith of Convair Fort Worth was re-elected this month as president of Goodwill Industries, Inc., of Fort Worth.

Goodwill, an agency of the United Fund, provides employment for handicapped people.

880 Wing Bent Upward In Structural Testing

No. 2 Convair 880, now undergoing structural tests, passed its third major trial with flying colors this month.

Fully loaded for the first time to test out critical flight conditions, 880 No. 2 passed its critical wing bending, shear, and torsion tests "most saisfactorily," said W. E. Wise, group engineer in charge of the testing program at the seaplane ramp at San Diego.

Simulating a positive maneuver flight condition, in other words, a stall of the plane at approximately 40,000-ft. altitude and speed of Mach .89, a total load of 154,000 lbs. was applied to the plane. The plane was made "weightless," in effect, floating free in the hangar, with the whole plane lifted by means of the weight relief hydraulic system.

In the tests the wing tips were flexed upward to the maximum point—approximately five feet from the normal straight line position.

Complying with Federal Aviation Agency requirements to prove out the plane's capabilities at different gross weights and altitudes, the test was made with and without pressure. The full-load test was repeated the next night with the cabin fully pressurized with air, the test conducted by remote control. Results were observed by closed circuit television in the central control headquarters.

Eighteen test lab mechanics of Dept. 31 under Wyatt Ingram, assistant foreman of the day shift, and Connie Bley, night shift, support the engineers conducting the test program. They are responsible for construction, checking, and maintenance of all the physical hardware and installation of jig fabrication used to put different loads on the plane.

"Structural tests on the 880 have been running so smoothly that we are now six weeks ahead of schedule," commented Wise. "We are now nearly 60 per cent through the test program on Plane No. 2."

Next on the program is local testing of the horizontal tail, pods and pylons, fuel calibration, and completely-loaded fuselage tests in simulated landing conditions.

Long-Time Safety Mark Set by AF Samaritans

Convair C-131 "Samaritans," flying hospitals of the First Aeromedical Transport Group at Brooks AFB, Texas, have been credited with outstanding performance over a five-year period.

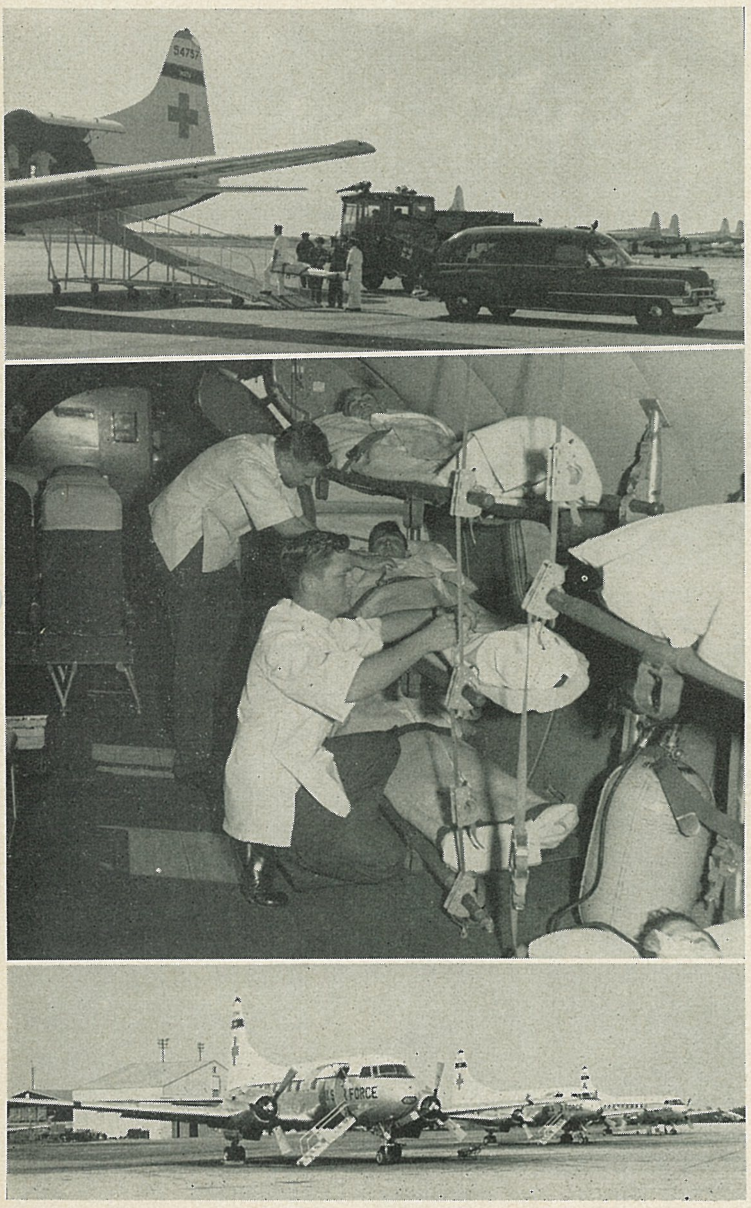
The Air Force outstanding unit award went to the 1st AMTG (MATS) this month for "exceptionally meritorious service" from Feb. 1, 1953 to Dec. 31, 1957.

During this period, the Convair-built planes airlifted military patients to hospitals throughout the United States in all kinds of weather conditions and over hazardous areas without a single passenger or crew fatality.

More than 240,000 patient movements were completed without injury or loss of life by accident and over 200,000 flying hours were logged with but one minor accident.

In presenting the award to Col. L. B. Matthews, 1st AMTG Commander, Maj. Gen. R. L. Waldron, Commander Western Transport Air Force, Travis AFB, Calif., also commended the unit for developing improvements in the airborne iron lung for transport of polio patients.

The C-131 air evacuation transport is based on the Convair-Liner design with special facilities for carrying medical patients.



SAMARITANS IN ACTION—Convair C-131 "flying hospitals" have lived up to Convair-Liner's great record for safety and service. Above are scenes of First Aeromedical Transport Group personnel in action at Brooks AFB.

Research Lab To be Dedicated

Convair San Diego's $2-million high temperature structures research laboratory will be formally dedicated at a May 13 ceremony.

The modern testing facility, located at the seaplane ramp, includes a 100x200-ft. enclosed facility for structural tests on planes and plane sections, new office building, and outside testing area. The research facility was built by Convair to be used as an inter-division installation.

Invited to dedication ceremonies will be General Dynamics and Convair officials, SD Division management and engineering administrative personnel, and equipment manufacturers.

F-106s and F-102s to Take Part In Armed Forces Day Exhibits

Antelope Valley residents will have an opportunity to inspect the latest experiments and production aircraft, including Convair's F-102 and F-106 jet interceptors, at two open house events planned in observance of Armed Forces Day.

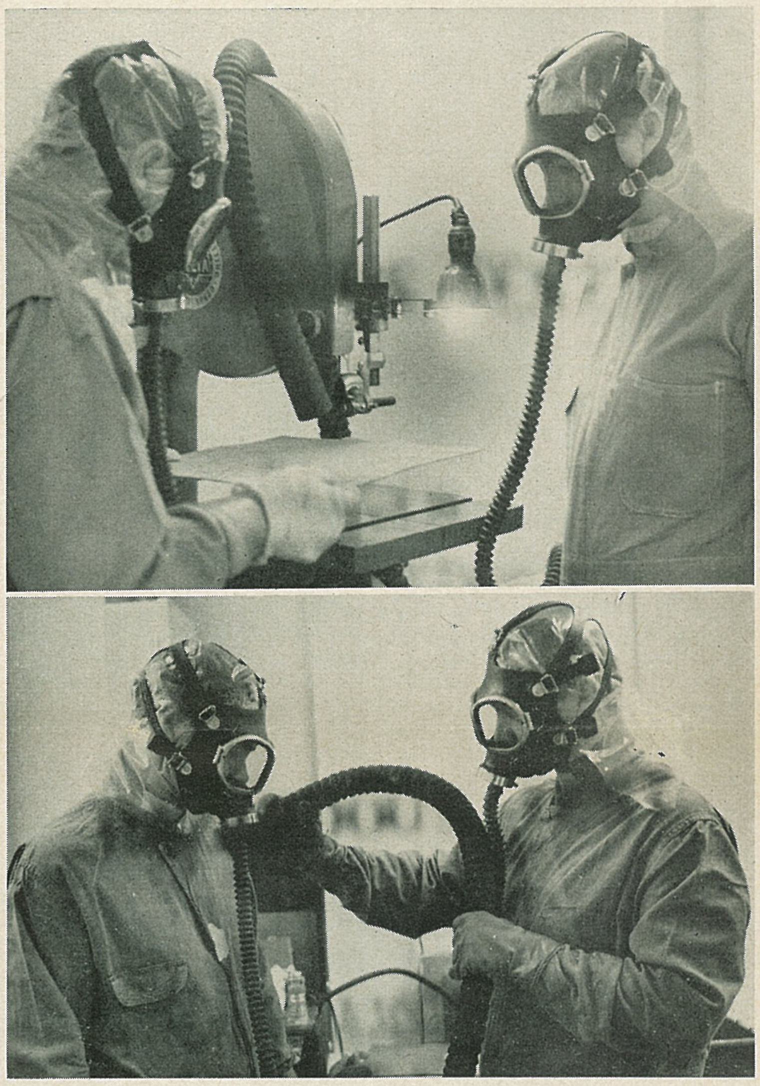
Static displays and fly-bys will be featured Saturday (May 16) at Air Force Plant 42, home of the Convair Palmdale facility, and on May 16 and 17 at Edwards Air Force Base, home of Convair Edwards facility.

At Palmdale Plant 42, static displays by tenant contractors will be arranged in the vicinity of the Air Force administration building on the south side of the field. Entrance to the area may be gained by way of 20th Street East, Ave. P or Ave Q. Plans for the day also include fire fighting and helicopter demonstrations.

Arrangements are being made by Plant 42 public relations subcommittee with R. B. Merwin chief of industrial relations, Palmdale, representing Convair.

Edwards Air Force Base will hold open house both Saturday and Sunday (May 16 and 17). Scientific demonstrations showing the research and development work at Edwards will be located in the huge maintenance and modification hangar, which covers an area the size of three football fields. The newest Air Force, Navy and Army weapon systems will be exhibited on the flight line.

Time schedules of fly-bys at both Palmdale and Edwards will be announced later.



ISOLATED—In top photo, C. F. Morris, right, of manufacturing research at Fort Worth and B. R. Proctor of Dept. 81-8 conduct test with piece of beryllium. "Space" suits are protective measure. Below, preparing to leave lab, they vacuum each other to pick up beryllium dust. Beryllium is under test by FW manufacturing research engineers for use in missiles and aircraft because of heat-resistant and high strength-to-weight characteristics.

'Space' Outfits Protect Special Metal Testers

Beryllium—the industry's latest glamour metal—is now undergoing a rigorous test series at Convair Fort Worth to determine how the precious metal may best be handled in the factory for use in the missiles and aircraft of the future.

As beryllium cannot be worked without special dust collecting equipment, the tests are being conducted in septically clean vacuumed room in the Dept. 81 area on the mezzanine.

The project is under contract with the Air Force and is designed to see how versatile this heat-resisting metal can be.

It's important for future Air Force use because of its heat-resistant characteristics and strength-to-weight ratio, manufacturing research engineers pointed out.

C. F. Morris of manufacturing research is conducting the tests with the help of B. R. Proctor of Dept. 81-8.

All precautions necessary to protect employees are being taken, according to Fred Temple, chief safety engineer, and Dr. J. K. Leverett, plant physician.

Morris and Proctor, who both underwent rigorous physicals prior to the project, wear a type of space outfit throughout the tests. Their uniforms, which include air line respirators, coveralls, rubber gloves and shoe covers, give them the appearance of Marsmen from outer space.

Inside the 8 by 8-foot test lab is a vacuum-type machine which collects beryllium dust particles in the air for later analysis.

Present testing has to do with how well the metal will bend at different temperatures. Engineers are also cutting into it with regular band saws.

An added safety feature on the band saw is a dust collector which gathers the metal particles at the point of the cut. Scraps and waste particles are carefully disposed of.

After the testing is over each day, Morris and Proctor run a vacuum cleaner type of apparatus over themselves, wash out the lab and change into another set of coveralls. They then change from the second set of coveralls back into street and work clothes after they leave the test room.

The beryllium sheet metal being tested costs around $300 per pound.



VISITORS—Over 50 San Diego school students, all exhibitors in city's annual Science Fair, were treated to tour of Convair SD and 880 test facilities recently.

Young Science Exhibitors See Test Facility

Young scientists had a close-up look at the Convair 880 jet transport the first of this month when SD Division played host to 58 exhibitors in the Fifth Annual Greater San Diego Science Fair.

R. H. Nall of SD educational services, as chairman of the Science Fair tours committee, arranged for the students to see the 880 test facilities at the seaplane ramp, supersonic wind tunnel, analog and digital computers as well as other points of interest within the plant. W. W. Lynt of SD military relations conducted the Convair SD tour and M. M. Saunders (Dept. 3-7) assisted.

* * *

Both of the sweepstakes winners of the 1959 Science Fair are the son and daughter of Convair SD parents.

Valerie Popp, 18, winning girl, is the daughter of C. J. Popp (Dept. 31) while top boy exhibitor, Paul Hixson, 17, is the son of D. I. Hixson of Dept. 6-31.

Valerie's project was entitled "A Quantitative Investigation of Molluscan Evolution," while Paul's was "An Aerodynamic Analysis; the Ring Billed Gull."

SD Team Wins IRC Table Tennis Meet

A table tennis team from Convair SD snagged first place in a tourney conducted by the Industrial Recreation Council this month.

The local entry won out over 12 teams, and edged a squad from Ryan in a special play-off game to take top honors. Trophies will be awarded May 6 at an IRC meeting at the Elks Club.

Team members are Lee "Chief" Majel (Dept. 171), Joe Brocamontez (Dept. 123), Ralph Cirillo (Dept. 272), and "Lucky" Sawamura (Dept. 6).

SHUFFLEBOARD GETS 50 ENTRIES IN DEPT.

J. W. Brett and Phil Estrada emerged as champs of the Dept. 180 shuffleboard tournament at Convair SD Plant 1. Runners-up were Lee House and Jim Halfacre. About 50 players took part in the department tourney with trophies awarded by CRA.

TOASTMASTERS CLUB PLANS LADIES' NIGHT

First Monday of each month has been designated "Ladies' Night" for Convair Toastmasters Club No. 457. Members will be joined by their ladies at the May 4 dinner meeting, 6 p.m., at the Astronautics executive dining room.

SD United Fund Gift Divided

San Diego's Community Chest will receive the lion's share of SD Division's Con-Trib-Club pledge of $175,000 to the 1959 United Fund.

The annual gift is paid quarterly.

A breakdown revealed this week that the San Diego Chest will receive $117,732 while $12,768 goes to Community Chests in other county communities.

They are: Carlsbad, $679; Chula Vista, $4,180; Coronado, $1,383; Fallbrook, $375; Oceanside, $2,820; Palomar United Fund, $1,937; Ramona, $176; Vista, $1,218.

Other philanthropic groups receiving pro-rated donations from Con-Trib funds for the fiscal year, September, 1958-1959, are City of Hope, $2,631; Hear Foundation, $426; Myasthenia Gravis, $527; Cystic Fibrosis, $283; Multiple Sclerosis, $1,287; National Recreation, $57.

San Diego Society for Retarded Children will get $1,251; San Diego Epilepsy Society, $876; Traffic Safety Council, $858; and United Cerebral Palsy, $3,304.

Donation to the American Red Cross is $33,000.

Allotment of Con-Trib's donation was approved by Employees' Committee.

Speedy Runners

Ancient Pastime of 'Coursing' Revived With 40-mph Whippets

A Convair SD man owns two of the fastest domesticated animals in existence.

Duke and Toby, a brace of pedigreed whippets, "stretch their legs" three times a week on the Mission Bay salt-beds, near metropolitan San Diego.

Owned by C. V. Hershberger of Convair SD, Dept. 15, the whippets zoom down the flats, sometimes reaching the astounding speed of 40 mph.

"In a 300-yd. dash they attain top speed the fastest and can outdistance any quarterhorse or racing greyhound, but on a longer course, their stamina would give way," Hershberger says.

Whippets are a pint-sized version of the racing greyhound. Unlike other hunting dogs, the whippet lopes along with head swinging back and forth, looking—not trying to pick up scent—for jackrabbits. Once the prey is spotted, Duke and Toby flash their vaunted speed. Working as a brace they close in on the frantic rabbit, with the final scene usually lost in a cloud of dust.

Coursing, as the sport is known, is not the popular pastime it was in previous centuries, Hershberger said.

Both whippets and coursing can be traced back to the days of ancient Egypt, through the Roman civilization and into medieval England, where, as the expression went, "no mean man" dared own a whippet.

But in the U.S. whippets became the "poor man's racehorse" and many a wager was laid on the outcome of a coursing event.

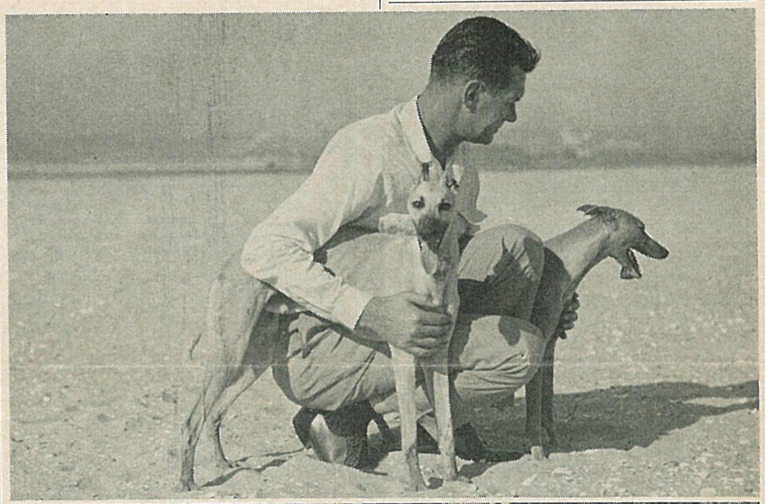
Hershberger, however, loves the sport for the sport's sake. He says Duke and Toby are excellent playmates for his two young children.

SD Man Co-Chairmans Management Meet

C. L. Terrel of Convair SD is serving as co-chairman of the Second Annual Southern California Management Conference May 7-8 at the Disneyland Hotel, Anaheim.

As president of the San Diego chapter of Society for the Advancement of Management, Terrel has been named to assist the general chairman, Vernon A. Metzger of Long Beach State College.

Terrel, staff consultant to assistant chief engineering administration at SD, will moderate the May 7 afternoon panel session on "Managerial Skills for a New Age." Convention theme is "Management in Transition."





SPEEDSTERS—Duke and Toby, a brace of pedigreed whippets, give their owner, C. V. Hershberger of Convair SD, a real "run for his money." They are able to attain a top speed of 40 mph.

Convair Man Assigned to Philippines Recalls Long War Years in POW Camp

A notation reading "9/3/41 to 2/28/45, Foreign Representative" on the company service record of Convair Pomona's George M. Messenger (Dept. 14) is probably one of the classic understatements of all time.

Messenger spent all except four of these 42 months as a "guest of the Japanese Emperor" in civilian internment camps in the Philippine Islands.

"I'm probably the only current Convair employee who earned most of his five-year service pin in jail," Messenger said. "Although six of us from Convair were in the Philippines at the time of the invasion, I believe that I am the only one now with the company."

Messenger joined Convair Dec. 30, 1940, as a station manager and meteorologist for the flight delivery department, and a short time later became Atlantic Division Superintendent for the department. In September he was appointed station manager in Manila, and left the United States as radio operator on the first PBY to be delivered to the Free Dutch Air Forces. All deliveries to the Dutch were being made through Manila at the time.

He was in Manila when the Japanese bombed Pearl Harbor, and shortly afterward he became civilian engineer in charge of communications for Gen. Douglas MacArthur.

After MacArthur and certain members of his staff were ordered out of the Philippines, Messenger assisted with "mopping-up" measures in Manila, and on Jan. 2, 1942, he was taken prisoner by the Japanese. He was interned first at Santo Tomas Internment Camp, and later at Los Banos Internment Camp in Southern Luzon. He remained there until Feb. 23, 1945, when he was released as a result of one of the most dramatic actions of the war in the Pacific.

"There were over 2,000 of us in the camp, and although we received brutal treatment it was much better than the military prisoners received in other camps," Messenger recalled. "Food was our most serious problem, and toward the last we received only one inadequate meal per day."

The internees created their own democratic government and elected a committee to act as a governing body and to protest measures not in accordance with international regulations governing civilian internees. They also established an educational system—a number of college professors were among the internees—and taught courses of all kinds.

Messenger studied college-level courses in algebra, analytic geometry, differential and integral calculus, statistics, dynamics, strength of materials and introductory courses in civil engineering and magnetics. He taught courses in radio communications and meteorology.

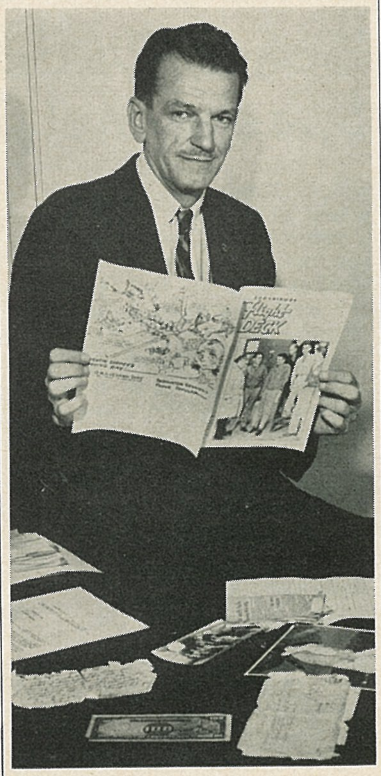
"We did everything we could think of to keep our minds occupied and to make time pass more quickly," he said.

"Our release was very spectacular. At 7 a.m. we were lined up for roll call and the Jap soldiers were in formation for calisthenics. American troop planes flew overhead, and as the first parachute trooper dropped, Rangers and guerrillas, who had surrounded the camp in secrecy, opened fire. It was all over in 15 minutes. Amtracks rolled up to the hospital to evacuate the sick and wounded, and four hours later all 2,100 of us were safe."

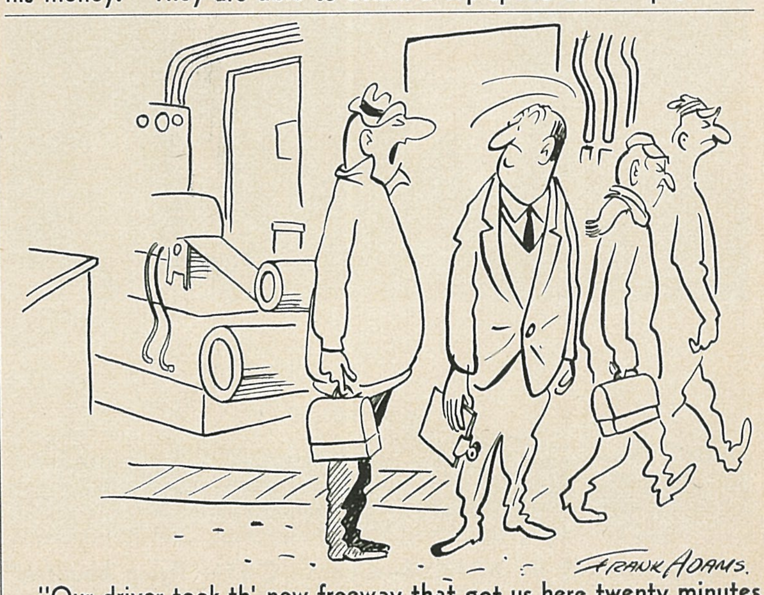
A few days—and several spools of red tape in obtaining transportation—later, the five Convair men were re-united with their families in the U. S. One of the six had died in a bombing attack on Corregidor.

After his return, Messenger became a navigator and later supervisor of training and navigation for the Consairway Division. He terminated when the Consairway contract was cancelled by the Air Transport Command.

Before rejoining Convair last August he was vice president of International Aircraft Maintenance Company.



RETURNS — George Messenger, veteran Convair man who was captured while assigned to Philippines at outbreak of World War II, holds copy of "Flight Deck," old Consairway Division paper, which is among his mementos.

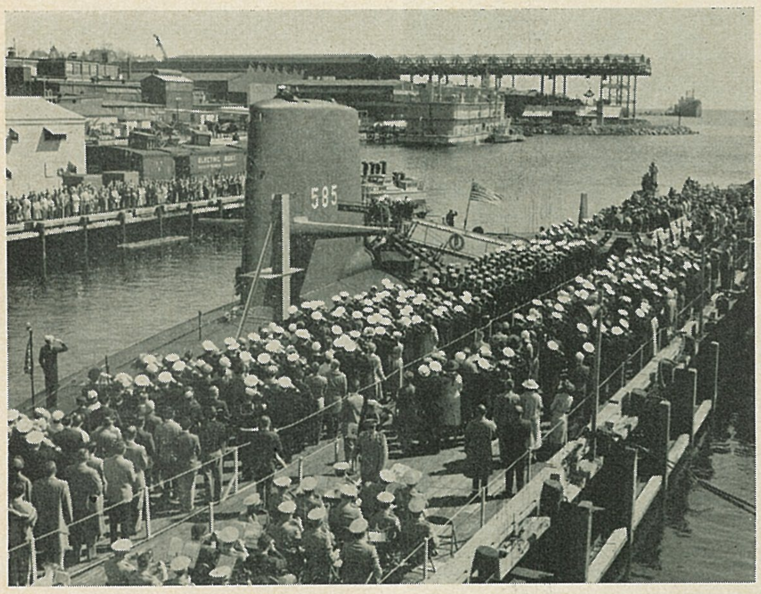


"Our driver took th' new freeway that got us here twenty minutes sooner, but it took another THIRTY minutes to pry his hands off th' steerin' wheel!"

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.



FASTEST—Stars and stripes go up on stern of nuclear powered Skipjack, world's fastest, at commissioning April 15 at Groton, Conn., shipyard of Electric Boat Division.

Skipjack Joins Fleet, Fastest, Deadliest Sub

GROTON—USS Skipjack, the world's fastest and deadliest nuclear submarine, became a unit of the U. S. Navy during commissioning ceremonies at Electric Boat Division here.

Before an audience of more than 2,000 the whale-shaped attack submarine was accepted into the fleet by Rear Adm. Chester C. Wood, commandant of the Third Naval District. Cdr. W. W. Behrens Jr. assumed command of Skipjack and ordered her colors hoisted.

Principal speaker during the ceremonies was Adm. James S. Russell, Vice Chief of Naval Operations, who termed Skipjack "the forerunner of a new generation of submarines."

"The combination of nuclear propulsion and streamlined hull gives her the greatest submarine performance of any ship in the fleet today," Admiral Russell declared. "She is controlled by a single man sitting at controls similar to aircraft controls. Her phenomenal speed and great maneuverability make her especially suited for carrying out her mission of attack."

Admiral Russell cited the builder, General Dynamics, for "the many outstanding contributions it has made in the development of submarines" and termed Skipjack the "latest creation of the engineering skill, dynamic imagination and productive know-how of the shipbuilders of Groton."

Earl D. Johnson, executive vice president of General Dynamics, turned the submarine over to the Navy, noting that Skipjack "has gone faster and deeper than any other submarine in the world. We know she has done what men only dared dream submarines would do just a few short years ago."

PR Manager Named By General Atomic

SAN DIEGO — Douglas M. Fouquet has been appointed manager of public relations and advertising for General Atomic Division.

Fouquet has been associated with the U. S. atomic energy industry for several years in public relations, advertising, sales promotion, and marketing activities. At General Atomic, where he assumed his new duties on April 1, he will work directly with Everett R. Holles, director of communications and assistant to Dr. Frederic de Hoffmann, General Atomic manager.

Fouquet was graduated in 1951 from Harvard College and received his master's degree in business administration from Harvard Graduate School of Business Administration.

S-C Introducing New 'Stereo' 60

ROCHESTER—A new "Stereo 60" Control Amplifier, Model ASR-444, has been introduced by the Stromberg-Carlson Division.

The "Stereo 60" is a complete stereophonic amplifier and preamp, with each channel providing 30 watts of rated power, and with peak power handling capacity of 60 watts in each channel.

540 Will Start Month Tour of South America

MONTREAL—A tour of South America by a Canadair-Convair 540 jet-prop transport, begins soon. The new Canadian aircraft will be demonstrated to airline operators, owners of executive aircraft, and military authorities.

The Canadair-Convair 540 is the jet-prop successor to the widely used Convair 240, 340, 440 series of piston-engined airliners of which more than 1,000 have been built.

The 540 has two Napier-Eland jet-prop engines which give it far higher speed, greater comfort, and much lower operating costs than its forerunners. It seats up to 58 passengers and flies at speeds up to 340 mph.

The South American tour of the 540 will last a month.

A similar tour of the United States and Western Canada began in March and a third 540 will tour Europe in June. The Canadian jet-prop, which is in production for the Royal Canadian Air Force, also was demonstrated at the World Congress of Flight at Las Vegas.

After flight trials early in the North American tour, Mohawk Airlines stated that the 540 improved block time by 10 to 15% over the carrier's Convair 240's on a five-stop round trip between Utica and Detroit. Allegheny Airlines were also impressed with the performance of the Canadair-Convair 540.

Canadair Announces Two Appointments

MONTREAL — Canadair announced two new appointments recently.

David W. H. Godfrey has joined the public relations department as assistant manager of information services. He has been assistant to the technical editor of The Aeroplane magazine in England.

Albert W. Yates, formerly of Fairchild Engine Division, has been appointed manager of military transport sales for Canadair. He attended Purdue University.

Fellowship Awarded To Stromberg Man

ROCHESTER — William J. Stolze, manager of the technical staff of the Electronics Division of Stromberg-Carlson, has been awarded an Alfred P. Sloan Fellowship in executive development, according to E. P. Brooks, dean of the School of Industrial Management at Massachusetts Institute of Technology.

Stolze is one of 45 outstanding young men throughout the country nominated by their companies and selected by M.I.T. for 12 months of study in depth of the fundamentals which underlie sound management action.

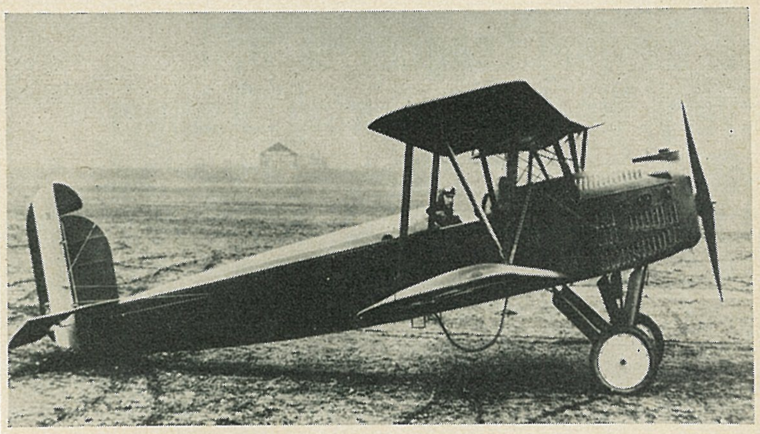
Microfilm Printer Rented by U.S. Navy

SAN DIEGO — Rental of an S-C 4020 High-Speed Microfilm Printer by the Navy, for delivery in 1959, has been announced by Stromberg-Carlson here.

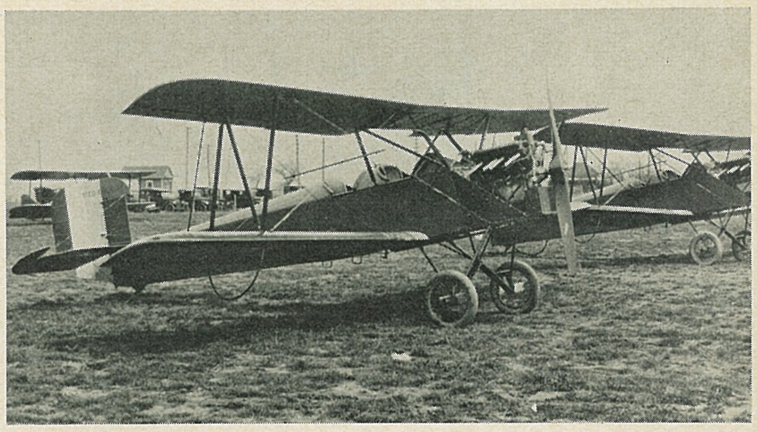
The printer, designed for use with high-speed digital computers, will be installed at the David Taylor Model Basin, Carderock, Md. This equipment is capable of recording data on 35mm film at speeds up to 15,000 characters or 10,000 graph plotting points per second.



NATO ANNIVERSARY—Frank Pace Jr., left, board chairman of General Dynamics and head of American Council on NATO, took part in April 7 anniversary dinner this month observing 10th birthday of NATO. Others, from left, Gen. Lauris Norstad, supreme allied commander-Europe; Joseph M. A. Luns, foreign affairs minister for Netherlands; John W. Nason, president of American Foreign Policy Association.



FIRST PRODUCT—A contract to build 20 TW-3 aircraft, such as this one, was first business obtained by newly formed Consolidated Aircraft in 1923.



FLEET OF 50—Competing against five other companies, Consolidated won design competition in 1923 for this PT-1, tandem trainer.

Newly-Formed Consolidated Acquires Contract For TW-3

(This is the seventh installment in a continuing history of Convair, based on research conducted by Howard O. Welty, now chief of editorial in Astronautics' communication department, and Nelson Fuller, manager of research and history, General Offices public relations.)

In 1923 Reuben H. Fleet set about forming his own aircraft company, Consolidated. He combined the assets of Gallaudet Aircraft of East Greenwich, R. I. with designs and engineering talent from Dayton-Wright Co. of Dayton, which was being dissolved as a subsidiary by General Motors.

From Dayton-Wright Fleet obtained the rights to all its plane designs, and the services of Col. Virginius E. Clark, the Dayton firm's chief design engineer since he resigned from the Air Service in 1921.

Clark was a Naval Academy graduate of 1907 who transferred to the Coast Artillery in 1909. Developing an interest in aviation, he was detached for duty with the Signal Corps and served with the 1st Aero Corps at North Island. Later he took advanced study in Massachusetts and won the first doctor's degree in aeronautical engineering conferred by M.I.T.



FOUNDER — Wartime photo shows Reuben Fleet in uniform. Leaving service in fall of 1922, he formed Consolidated in following year.

For Dayton-Wright, Clark designed the TA-3 and TW-3 primary trainers, notable for having fuselage structures of mild steel tubing, a material that proved to be rugged and reasonably cheap to fabricate.

Along with Clark and the Dayton-Wright designs, Fleet acquired an uncompleted contract for 20 TW-3 aircraft. He and Clark were to parlay an improvement of this design into the foolproof, Consolidated trainer that virtually every Army and Navy airman had for primary instruction between 1925 and 1935.

That same year (1923) the Army announced a competition for an improved primary trainer. Clark designed a simple biplane of tubular steel fuselage construction, having the cockpits arranged in tandem. (In the side-by-side TW-3 neither student nor instructor had been satisfied.) After tryouts in which five other companies competed at Brooks Field, San Antonio, Consolidated won a contract for 50 PT-1 trainers. Fleet's fledgling enterprise was strongly in business. The next move was to find quarters to fit the contract.

'Aviation No Amusement': Trotsky 'Great Instrument of Future'

The year of Consolidated's founding, 1923, found the U. S. Aviation industry at a low ebb. Things were different abroad. In England, airlines serving the Continent carried 45,531 passengers across the channel. In Russia, Minister of War Trotsky was quoted in Pravda: "Aviation is not an amusement, but the great instrument of the future."

* * *

U. S. Army airmen recall 1923 as the year of three proud achievements.

The continent was flown nonstop for the first time, May 2-3, New York to San Diego.

The first refueling aloft was accomplished June 25, also at San Diego.

On Sept. 5, Brig. Gen. Billy Mitchell's bombers sank the obsolete battleships Virginia and New Jersey in the last of that airman's historic challenges to established military thought.

SD Bowling Leagues to Roll Every Week Day During Summer

Summer bowling leagues at Convair SD will roll into action at five different bowling alleys the week of May 4, Jim Hayman, commissioner, reported.

Entries are now being taken for both day and swing-shift activity.

Following is a list of the contemplated day-shift leagues.

MONDAY — Clairemont Bowl (10 teams), contact Dick Hanson, ext. 1809. Bowlero (8 teams), contact June Davis, ext. 1104. Also at Bowlero (10 teams), contact Howard Paynter, ext. 2115. All leagues start at 6:30 p.m.

TUESDAY — Pacific Recreation (trio league), contact either George Burham, ext. 2741, or Catherine Hayman, HO-6-1262. Bowlero (8 teams), contact Bob Heath, ext. 1203. Also at Bowlero (10 teams), Dick Bower, ext. 2574. Both Bowlero leagues start at 6:30 p.m. The trio league starts at 4:30 p.m.

WEDNESDAY — Pacific Recreation (16 teams), Jim Hayman, ext. 1155. Starts at 6:30 p.m.

THURSDAY — Pacific Recreation (16 teams), Jim Hayman, ext. 1155. Victory Lanes (12 teams), Frank Kelly, ext. 2141. Both start at 6:30 p.m.

FRIDAY — Tower Bowl (18 teams), Frances Brooks, HO-6-8793. Clairemont Bowl (12 teams), Glen Farringer, AC-2-6351. Bowlero (8 teams), Jim Hayman, ext. 1155. Both Tower and Clairemont leagues start 6:30 p.m.; Bowlero at 9 p.m. All the above are mixed leagues.

Bowlers interested in forming 700 and 750 mixed leagues to roll Wednesdays at 6:30 p.m. should attend an organizational meeting at the Tower Bowl May 1 at 7 p.m.

Plans for swing shift keglers include a trio league and a mixed fivesome league, both to roll Wednesdays at 1:30 a.m. at Pacific Recreation. Contact Mike Brooks, ext. 583, Plant 2, for additional information.



REWARDED — Charles M. Szymczak, Dept. 31 SD, this month received his 25-year service emblem. He started with Consolidated in Buffalo, N.Y.



TOP FIVE—Convair SD Management Club team's 3,058 handicap series placed them fifth in nation out of 449 teams entered in recent National Telegraphic Bowling Tourney. Members are (from left): Milt Walker (Dept. 188), Delbert Meredith (Dept. 31), Bryce Bludworth (Dept. 192-7), Bill Flanagan (Dept. 31) and J. Hammer (Dept. 101).

1,500 See Rose Show Sponsored By Garden Club

Crowds estimated at 1,500 flocked to see the Garden Club's annual Rose Show April 19 at the Floral Association Bldg. in Balboa Park.

They viewed over 400 entries, largest number ever on display at the Convair SD group's annual affair. E. L. Zimmerman, club commissioner, termed the show an "overwhelming success," both in quality and quantity of entries.

Spokesmen of city garden clubs and associations were also unanimous in praise of the show.

Entries broke down as follows: 223 single roses; 78 three-roses; nine six-roses; 12 florabunda and grandiflora; 48 arrangements; 12 corsages; and 18 children's entries. Twenty-seven individual entrants were awarded blue ribbons. Some won as many as four ribbons.

Coveted best of show awards in various classes were won by C. J. Lewis (Dept. 25), single rose; Ora Carpenter (Dept. 600-0), three-roses; Gloria Jodka (Dept. 2), six-mixed; Mr. and Mrs. C. J. Snyder (Dept. 93-8), florabunda; Lora Lee Young (Dept. 600-3), grandiflora; Jean Henderson (Dept. 406), corsage; Esther Barksdale (Dept. 15), arrangement; John Bley (Dept. 31), children's category. Many of above are wives, daughters or sons of husbands or fathers working in corresponding departments.



TOP BOWLER — Dale Mansfield (Dept. 280) rolled high game (266) for SD Management Club in recent National Telegraphic Tourney. The score was third high in nation. His series was 620.

Adult Ballroom Dance Classes Now Starting

Two adult ballroom dancing classes for Convair SD folk will start at the Grace McGrath Dance Studio next week.

Both will be adult "brush up" courses, especially aimed at encouraging people who were previously enrolled in dancing instruction and were forced to drop out for one reason or another. However, fundamentals are stressed in the first lessons, from there progressing to the more advanced steps.

The Tuesday series of classes will start May 5 at 8 p.m. and the Thursday sessions May 7 at 8:30 p.m.

A special series of summer classes will be held for teenagers every Wednesday starting at 7:30 p.m. Convair employees and family members get special rates on all classes through CRA.

Advance registration is not necessary, but additional information is available by calling BE-4-8686, evenings and Saturdays. The studio is located at 1322 Fifth St.

Tropical Fish Club Elects New Officers

The Tropical Fish Club at Convair SD last week elected a new slate of officers for the coming fiscal year. They will be installed May 12 at 7:30 p.m. at a meeting in the CRA Clubhouse on Pacific Highway.

The new officers are Bob Martin (Dept. 603), president; Dick Rowe (Dept. 292), vice president; and Jan Rowe, wife of Dick Rowe, secretary-treasurer.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period April 16 through April 30.

Twenty-year: Dept. 6, S. G. F. Haas Jr., R. L. Phillippi; Dept. 8-1, E. V. Laird.

Fifteen-year: Dept. 6, H. L. Harris, Phyllis V. Hernandez; Dept. 92-0, Pansy V. Ewing; Dept. 117-0, Alice F. Losey; Dept. 188-3, J. F. V. Dunn; Dept. 288-5, L. F. Pendarvis; Dept. 400-6, L. L. Brown; Dept. 401, Edward Zouhar.

Ten-year: Dept. 6, R. E. Dietz; Dept. 14-9, Catherine C. Payne; Dept. 15-5, W. G. Matlock, P. R. Oncley; Dept. 21-1, Jean Mueller; Dept. 25-2, Janie W. Watson; Dept. 31, O. P. Schwichtenberg.

Dept. 102, Guadalupe M. Castillo; Dept. 115, A. K. McConnell; Dept. 144, A. E. Wetterberg; Dept. 188, F. G. Belsky, Janet C. Peterson; Dept. 192-2, R. H. Simpson.

Dept. 215, T. J. Nilsson; Dept. 216, Ione H. Brown, Beatrice B. Kirnan, R. C. Price; Dept. 218, R. F. Haight, Myrtle B. Splittstoesser; Dept. 230, J. M. Dennis; Dept. 233, Raymond Figueroa.

Dept. 266, R. L. Sanders; Dept. 267, E. G. Troller; Dept. 271, J. R. Chapin, J. V. Colson; Dept. 292-1, Phyllis E. Stargell; Dept. 600, Emil Bender, L. W. Dean, E. H. Williams; Dept. 603, R. G. Klinger, G. F. Wheeler, Charlie Whittle.

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective April 13.

Dept. 4-0, Material: To material services asst. supervisor, M. G. Tambornino.

Dept. 6, Engineering: To chief technical engineer, C. W. Frick. To research group engineer, F. M. Millican. To asst. research group engineer, D. A. Bell, J. C. Dobyne Jr.

Dept. 11-0, Contracts: To contract adm.-military, D. R. Stewart.

Dept. 15-6, Customer Service: To service publications asst. supervisor, J. A. Holland, P. R. Tyler.

Dept. 34, Material Procurement: To buying supervisor, W. N. Liddle, D. L. Macey. To purchasing agent, M. Formanek, H. L. Henrie.

Dept. 95-3, Estimating: To spares estimating asst. supervisor, W. Minando, J. J. Shults.

Dept. 192-5, Manufacturing Control: To M/C asst. supervisor, R. A. Gadow.

Personals

SAN DIEGO

In grateful acknowledgment of the many expressions of good wishes accorded me upon my retirement from Convair, after a relatively short period of employment, I extend to all of you my sincere best wishes for continuing prosperity, wonderful personnel harmony and the broadest community appreciation.

My association with Convair's security force, an excellent organization, and likewise with the many other splendid, courteous people among your employees and business associates, has been a truly heartening experience.

Earl W. Layton

* * *

To the many Convair associates and personal friends of Jim Saftig — my deepest thanks for the many beautiful flowers and expressions of sympathy during my recent bereavement.

Beatrice M. Saftig

Births

SAN DIEGO

DIENER—Son, Mark Richard, 6 lbs., 13 oz., born March 23 to Mr. and Mrs. Richard Diener, Dept. 6.

LONGMORE—Son, James Morley, 8 lbs., 1¼ oz., born April 4 to Mr. and Mrs. John Longmore, Dept. 180.

Retirements

SAN DIEGO

ANELLO—Benedetto, Dept. 204. Seniority date May 7, 1953, retirement effective April 10, 1959.

BOURDON—L. R., Dept. 102. Seniority date May 29, 1923, retirement effective March 9, 1959.

BROGAN—M. C., Dept. 8-1. Seniority date Jan. 2, 1952, retirement effective April 17, 1959.

EATON — Perry, Dept. 25. Seniority date March 18, 1937, retirement effective April 10, 1959.

LURRY—J. R., Dept. 14-4. Seniority date May 16, 1951, retirement effective March 24, 1959.

NILL—P. S., Dept. 8-0. Seniority date Oct. 9, 1952, retirement effective April 3, 1959.

MANNING—J. M., Dept. 407. Seniority date Oct. 21, 1946, retirement effective April 10, 1959.

MAY—J. F., Dept. 603-7. Seniority date Aug. 21, 1953, retirement effective April 11, 1959.

SMITH—M. C., Dept. 188-1. Seniority date Feb. 14, 1951, retirement effective April 10, 1959.

TORRES—M. S., Dept. 25-2. Seniority date Jan. 4, 1952, retirement effective April 10, 1959.

WILSON—Claud, Dept. 25-2. Seniority date July 17, 1953, retirement effective April 13, 1959.

Discount Offered For 'Windjammer'

Special reduced rates to the Cinemiracle production, "Windjammer," now showing in San Diego at the Fox Theatre, 7th and B St., can be obtained through employee services at Convair SD.

Discount prices are available for Monday, Tuesday, Wednesday, Thursday and Sunday evenings at either the 7:15 or 9:45 p.m. performance. They are priced at $1.40, as compared to the regular price of $1.75.

A special rate for school students is also available. Tickets are priced at 75c. They are good for Saturday matinees to be held May 2 through June 27 starting at 10:30 a.m.

Forms for both types of tickets are available at employee services, both Plants 1 and 2, which must be filled out in advance and sent to the theater box office.

SD, Astro Golfers Deadlock for Lead

Golf teams from Convair SD and Astronautics were tied for the lead at the halfway mark this month of the annual inter-division matches. Convair Pomona was ranked third.

Each division entered four four-man teams. SD and Astro tied with 1,043 strokes. The final round will be played June 28 at Circle "R."

No-Hitter Puts Team in Finals

Art Bunge (Dept. 15) last week struck out 13 batters while throwing a no-hit ball game against the El Cajon Merchants to lead the Convair "A" team into the finals of the La Mesa Invitational Softball Tournament.

Teammates, led by Bill Murphy (Dept. 292) who homered with two men on, and Dick Fenton (Dept. 14) who lashed out two singles and a double in four times at bat, backed up Bunge's perfect game with an eight-run attack.

The victory put the "A" team into the finals against Anderson's Furniture who had edged the Convair Eagles 2-0 in the semi-finals. The Eagles defeat came after the game had gone into two extra innings.

Camera Club Sets Quarterly Contest

Charles Sick, assistant manager of the photographic department of the Union-Tribune Publishing Company, will judge the second quarterly contest staged by the Convair SD Camera Club.

The contest, limited to photo journalistic shots of the San Diego area, will be held at the Photo Arts Bldg. in Balboa Park May 11 starting at 7:30 p.m.

Visitors are welcome to attend the competition. Club members are also participating in the San Diego Photorama May 3.

Advanced Charm School Course For SD Women to Start in May

Opening date of the advanced charm school course for Convair San Diego women has been tentatively set for May 13.

Registration is still open to all Convair SD women, wives, or daughters who have completed the basic charm classes given by Edith Antelline, instructor, explained Martha Woodberry, CRA commissioner of women's activities.

The extension course, which will continue the training begun in the basic courses on a more personalized basis, will be held each Wednesday, 7-9 p.m., for a six-week period in the House of Hospitality, Balboa Park.

Capacity of the classes is restricted to 25 persons, with the first to sign privileged to enter the opening course next month. All others will be put on a waiting list for later courses.

Individual attention for each student will keynote the advanced course, said Mrs. Antelline. With the group limited to 25, personal instruction will be given to each woman in figure correction, posture, walking, modeling technique, makeup, hairstyling, voice improvement, business and social etiquette and apparel.

With CRA underwriting the greatest part of the cost, the entire price per person is cut to $14 for the course, payable upon registration.

Women may sign up for the new course, given for the first time at SD, at employee services, Plant 1 and Plant 2, or through Dorothy Kniffen at Rose Canyon, ext. 2239.

Entries Now Open For Handball Play

A league at Convair SD for handball enthusiasts is now being considered.

Applications from two-man teams, representing departments, are now being taken by Pete Beyrer of the CRA office, ext. 1245. Beyrer said round-robin play would be held at the YMCA, 8th and C Sts., on Saturday afternoons as soon as enough teams are listed.

Gillespie Now Site For Fishing Club

All future meetings of the CRA Fishing Club at Convair SD will be held at the Gillespie Field Clubhouse in El Cajon, H. D. Cromartie, commissioner, said last week.

The Conference Bldg. in Balboa Park will no longer be employed as the meeting site, Cromartie said. The club meets the third Tuesday of the month at 7:30 p.m.

SD SPORTS CARS FIRST, SECOND IN ATLAS RALLY

Sports car drivers from Convair SD invaded "foreign ground" April 12 and captured the top standings in the first annual Atlas Rally sponsored by the Astronautics Sports Car Club.

Cars entered in the rally totaled 162 of which 134 finished.

Ranked in first place with a time error of 1.08 minutes was the driver-navigator team of Dick Bauer and Bob Dunn (both SD Dept. 6). This was the second major win of the year for Bauer and Dunn who won the Don Diego Rallye in February.

Another Dept. 6 team, D. Hall and F. G. Brickson finished second with an error of 5.76. Dick Mobraaten and Dick Elms came in fifth.

In team competition a Dept. 6 group came in second. Members were Bauer, Dunn, Mobraaten, Elms, Bill Newbery and George Andert.

Two special awards were also won by local drivers. Second place in the novice class went to Jerry Wetterholm and Peter Aperlo. Tom Kienholz and J. Wasserboehr won best Jaguar honors.

Results of a Hare and Hounds event conducted by the SD Sports Car Club this month were as follows: Jerry and Betty Robinson, first place; Vince and Barbara Cappelletti, second place; and Roy and Jean St. John, third place.

CRA Sports & Recreation Convairiety

Lee Arsenault Golfs 133 Net To Win SD's Yater Memorial

A virtual "unknown" stole the show and the Yater Memorial Golf trophy in SD's top medal play competition which concluded action this month at Rancho Santa Fe.

Lee Arsenault (Dept. 146), who has played about 16 rounds of golf in the past four years, played two consistent rounds of 85, 84 to an 18-stroke handicap to lead the field with a low net of 133.

Although his golfing has been sharply curtailed during the past 15 years, Arsenault at age 14 was a consistent shooter in the 70s and worked four years as an assistant to a teaching professional in Massachusetts.

Jammed up in second place with 134s, only one stroke off the "top money," were Jim Lothringer (Dept. 6), Scotty Rutherford (Dept. 146) and Joe Pearl (Dept. 216).

Other winners were:

0-12 handicap class: C. "Curley" Maxfield (Dept. 120), low gross; Cecil B. White (Dept. 146) and Bill Glithero (Dept. 292) tied for first low net; Ralph Way (Dept. 400), third low net.

13-18 handicap class: Joe Nunez (Dept. 31), low gross; Lothringer, Rutherford and Pearl took low net honors.

19-24 handicap class: Mel Robinson (Dept. 280), low gross; Carl Bieberdorf (Dept. 6), low net; Gene Howell (Dept. 288-8) and Dan Weaver (Dept. 120) tied for second low net.

25 and up handicap class: John Dayton (Dept. 401), low gross; Charles Constantino (Dept. 400) and Lee Snyder (Dept. 600-2) tied for first low net; Jack Bearss (Dept. 292), third low net.



AFFECTIONATE—Lee Arsenault, winner of SD's Yater Memorial Golf Tourney, wasn't afraid to kiss putter, the club most often the golfer's downfall, after posting winning low net of 133.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD Sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ASTRONOMY CLUB — Meetings May 1 and May 15, both at Gillespie Field Clubhouse starting 8 p.m. Movies on the Atlas missile to be shown at the former and a talk on radio astronomy by Dr. W. C. Erickson at the latter.

BALLROOM DANCING — Adult "brush up" courses start May 5 at 8 p.m. and May 7 at 8:30 p.m. at Grace McGrath Dance Studio, 1322 Fifth St.

BOWLING — Summer league entries now open. Play starts week of May 4.

BRIDGE CLUB—Session May 5, 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CAMERA CLUB — San Diego Photorama May 3, Conference Bldg. area, Balboa Park. Quarterly contest May 11, 7:30 p.m., Photo Arts Bldg., Balboa Park.

CHESS CLUB — Meets each Wednesday, 7:30 p.m., CRA Clubhouse on Pacific Hwy.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse. Third annual concert May 7, 8:30 p.m. at Hoover High School Auditorium.

GOLF — Registration open for golf lessons to be held at Mission Valley Country Club. Call ext. 1705 to register.

GUN CLUB — Shoot May 3, 9 a.m., at Gillespie Field. Meeting May 12, 7:30 p.m. at Gillespie Field Clubhouse.

HANDBALL — League now being formed. Contact Pete Beyrer, ext. 1245, to register.

JUDO—Instruction every Wednesday and Thursday, 7-8:30 p.m., Federal Bldg., Balboa Park.

MOVIES—Reduced-price movies each Tuesday night at Academy, 3271 University Ave. Admission: adults, 25c; children, 10c.

SKI CLUB—SD-Astro dinner-dance May 2, Mission Valley C. C. Call Joan Brennan, ext. 523, Plant 2.

SOFTBALL — Slow pitch exhibition game for shop league managers May 1, 8:30 p.m. at Presidio Playground.

SPORTS CAR CLUB — Meeting May 6, 7:30 p.m., Natural History Museum, Balboa Park.

SWIMMING — Next free swim night Saturday (May 2), 7-9:30 p.m., Mission Beach Plunge. Tickets at employee services, both plants, and from departmental representatives.

TROPICAL FISH CLUB—Installation of officers May 12, 7:30 p.m., CRA Clubhouse on Pacific Hwy.

VOLLEYBALL — Shop league plays Wednesdays and Thursdays, first game starting 6:30 p.m., Federal Bldg., Balboa Park.

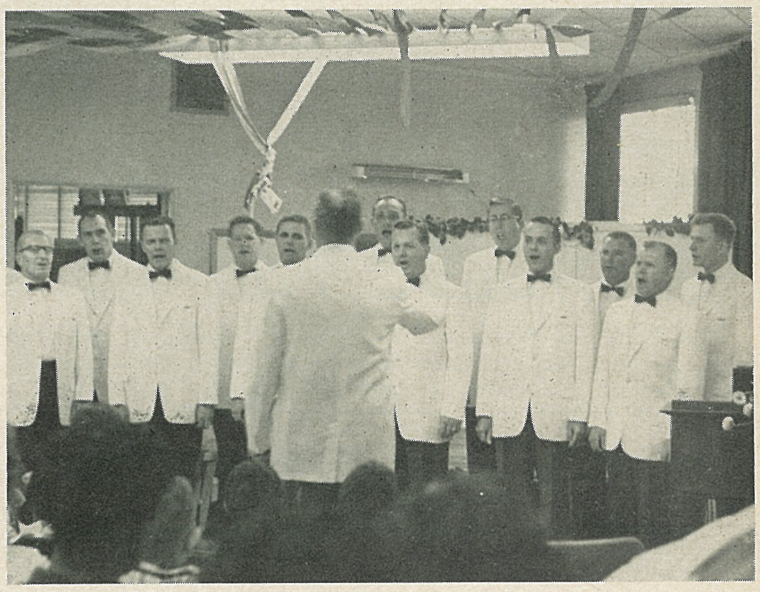
WOMEN'S ACTIVITIES—Registration open for advanced charm school course.

SD Security Dept. To Picnic in May

Members of the security department at Convair SD, both Plants 1 and 2, will hold a golf tourney Saturday (May 16) starting at 9 a.m. on the Singing Hills course. One dollar will be collected from players on the first tee for prizes.

Following the tourney, security department personnel and their families will hold a potluck supper and picnic at Pecan Park.





MUSICAL TREAT — Annual CRA concert at Convair SD this year will feature the Choralaires (above), SD's 32 mixed-voice chorus, and a special added attraction, the Convair Pomona Missilemen (on side), an all-male chorus. No admission will be charged for the concert, which starts at 8:30 p.m., May 7, at the Hoover High School Auditorium.

14 Teams Sign Up For Shop Softball

Fourteen teams have responded to the first call for shop league softball at Convair SD, Gil Crosthwaite, commissioner, reported.

He said only two more entries will be accepted to round out the slate into two leagues of eight teams each. The two openings will be filled on a first-come, first-served basis, by calling Crosthwaite, ext. 1245, Plant 1.

Play will start the week of May 18 at a playground in the local area yet to be named. Each team will play once-per-week for 14 weeks.

Crosthwaite also asked all managers of shop league teams to attend an exhibition of slow pitch softball at the Presidio Playground this Friday (May 1) at 8:30 p.m.

If enough interest is shown, one of the two shop leagues will likely be converted to a slow pitch league.

SD MAN'S CATCH TOPS QUALIFIERS

R. L. Russell, assistant foreman in Dept. 603-6, Convair SD, Plant 2, topped the Mission Bay sportsfishing qualifiers Sunday (April 12) with his 22-lb., 12-oz. yellowtail caught from the "Solano" off La Jolla.

Missilemen to Appear At Choralaires Concert

Choralaires, Convair SD's 32-member mixed chorus, will present their annual concert for Convair families and friends Thursday (May 7) starting at 8:30 p.m. in the Hoover High School Auditorium.

A special added attraction will be the appearance of the Convair Pomona Missilemen. An all-male chorus, they will be making their first appearance in the San Diego area. They are expected to sing seven selections.

W. A. Vogel, Choralaires director, said the program has been planned somewhat on the "light" side, adding that there will be plenty of variety to please every musical taste.

No admission will be charged for the 90-minute concert. Among selections that will be heard are "Great Day," "Donkey Serenade," and two Fred Waring choral arrangements, "America Our Heritage," and "I Believe." Also on the program are "I Am America," and the "South American Serenade."

Soloists with the group include Jim Rogers (Dept. 8), Leo Bray (Dept. 31) and Helen Humphrey.

Both vocal groups will be feted at a reception after the concert.

Polo Grounds Facilities Open To SD Riding Club Members

Riding facilities at the Polo Grounds in Mission Valley (formerly Palomar Stables) will be offered to members of the Convair SD Riding Club at special CRA discount prices, Marc Beresford, co-commissioner, announced.

Now under the management of "Danny" Daniels of the Kenmore Stables, the Polo Grounds will be limited to instruction only, either private or class, Beresford said.

Facilities are available upon presentation of the Convair SD Riding Club membership card but members are subject to good horsemanship and stable rules.

Beresford cautioned that riding facilities in the area are growing scarce and urged members not to jeopardize their privilege and adhere to the local ground rules.

Advanced reservations are required. As a temporary measure they can be placed by calling the Kenmore Stables, CY-5-5352. A similar arrangement at the Flying Hills Ranch has been available for some time. Inquiries concerning that location should be directed to Virginia Smith, HO-3-4433.



STUDY ON SKATES—This photographic study of a boy on skates against a blurred background won first place in the latest quarterly contest sponsored by the CRA Camera Club. It was snapped by Edmund F. White (Dept. 61). The subject is his four-year-old son, Brad.

JEEP CLUB MOVES INTO GEAR AT SD

The Jeep Club at Convair SD has hit the road again after a spell of inactivity.

Local members banded with the San Diego Ridgerunners April 12 for a jaunt to the ghost town of San Felipe. Plans have been laid to consolidate the Convair group with the Ridgerunners in order to take advantage of the regular schedule of activities.

The Convair group will continue as a separate unit although governed by the same by-laws and dues as the Ridgerunners. Convair folk, owning vehicles with four-wheel drive, who wish to join the club should contact A. G. Thomas, HI-4-1758, Wednesdays only, between 5-5:30 p.m.

Next joint outing for the group will be a trip through Split Mountain on May 10. Members will leave Scissors Crossing on Hwy. 78 at 8:30 a.m.

Williamson Scores In Pistol Tourney

Joe Williamson (Dept. 401) swept both events of a competition staged by the Convair SD Pistol Club April 12.

He scored 290 points (out of a possible 300) in the .22 caliber class and 284 in the short national match event. B. L. Broadway (Dept. 603) placed second in both categories.

Carl Hornburg (Dept. 166) and R. D. Miller (Dept. 600) placed one-two in the expert class and R. G. Lair (Dept. 406) and Arley Utter (Dept. 129) took sharpshooter honors.

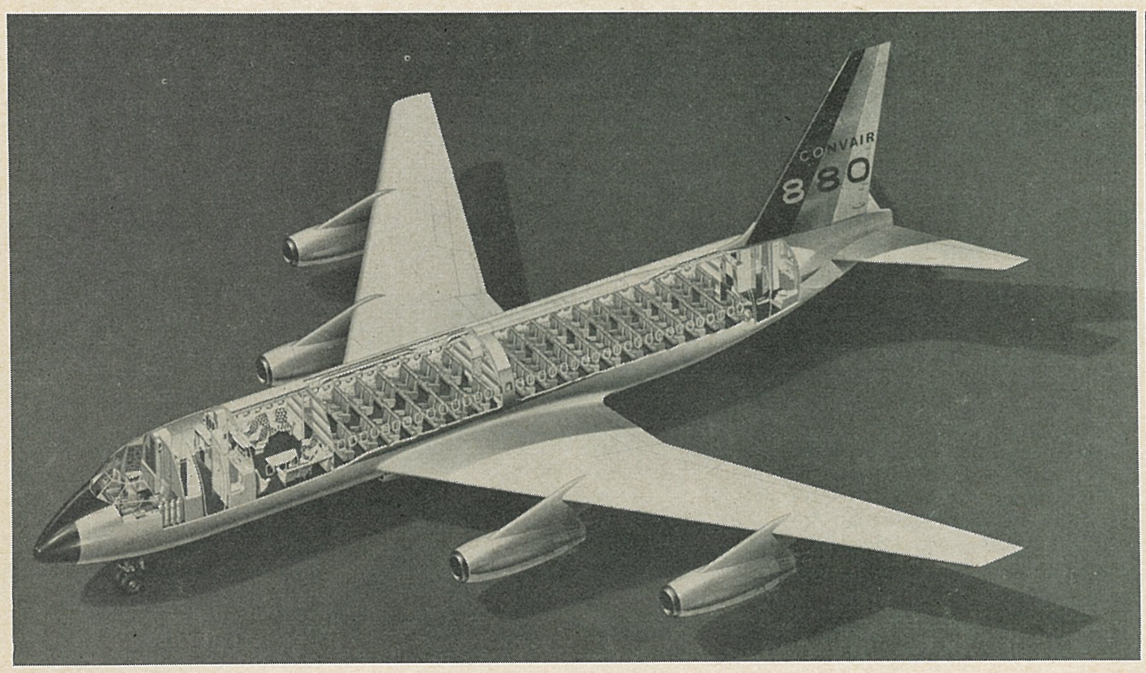
Williamson had an exceptional slow fire score of 97 out of a possible 100 in the national match. Ash Bishop, CRA commissioner, said that 10 of the shots, fired over a 25-yard range, could be covered with a silver dollar.

Gun Club Sponsors Silver Bird Shoot

A "silver bird" shoot will be sponsored by the Convair SD Gun Club May 3, starting at 9 a.m. at the Gillespie Field site, Jack Swank, commissioner, said.

Prizes will be awarded in skeet and trap events, he added.

Swank said W. U. "Gunner" Gatterman would give instruction on trap shooting at the May 12 meeting at the Gillespie Field location. Movies will also be shown at the 7:30 p.m. meeting.



INSIDE LOOK—Artist's drawing shows first-class and coach seating arrangements of Convair 880 jet transport. Club compartment seats are under contract to Chance Vought Aircraft, Inc. First-class seats are being built by National Seating Co.

Three Types of Jet Transports Slated For San Diego Mfg.

Slated as follow-ons to Convair SD's first jet transports now in production are sister ships, the Convair 600 and the intercontinental 880.

The intercontinental 880, which is due to go into airline service the fall of next year, is designed for a longer range than the basic 880 now undergoing flight testing. The structure has been modified to allow for a higher payload with the maximum takeoff gross weight to be approximately 20,000 pounds more than the basic 880. Design calls for minor structural changes to the wing. Fuel capacity will be increased to 13,870 gallons making possible such routes as from Brussels to Leopoldsville in Belgian Congo or New York to Copenhagen.

Both the intercontinental 880 and the 600 will be equipped with leading edge slats which will cut down the stalling speed to about 106 mph. Stall speed of the basic 880 is 113 mph. Cutting down the stalling speed will allow the transports to land in shorter distances, making possible use of shorter fields.

Airline companies which have already ordered the intercontinental 880 are Swissair and Scandinavian Airlines System, five planes; Transcontinental of Argentina, four; REAL-Aerovias of Brazil, four.

The basic 880 has been ordered by Trans World Air Lines, 30; Delta Air Lines, 10.

The intercontinental Convair 880 retains the basic 880's medium-range capability and economy and many features in common, including cruising speed of 615 miles an hour, faster than any of the other jet transports now being built. The Convair 600 will have a cruising speed of 635 mph.

Both 880s will be able to accommodate 110 passengers in the coach version, while the 600 will be able to carry 121 passengers in the coach version. In a first-class version the Convair 880 will carry 88 passengers in a four-across seating arrangement. Conversion to coach (five-across seating arrangement) can be made by an airline crew in four hours.

The Convair 880 is powered by four General Electric CJ-805-3 jet engines, commercial version of the military J-79 that powers the Convair B-58, advanced bomber now being built at Convair Fort Worth for the Air Force.

The 600 will be powered by four General Electric CJ-805-21 aft-fan jet engines equipped with thrust reversers.

The Convair jet airliners will have a first-line service life of from 10 to 20 years. Their speed and medium-range capability makes unlikely the possibility of their being succeeded by any other subsonic aircraft. And with the high cost of supersonic aircraft development, it is highly improbable, say aircraft officials, that they will be ready for commercial use within the next ten years.

Key Performance Data on Jet Transports

Specification Details and Performance Data

			Basic 880	Intercontinental 880	600
Performance					
Cruising speed			615 mph	615	635
Range	(Full first-class payload and normal reserves)		3450 statute miles	4210	4400
Maximum cruise altitude			40,000 feet	40,000	40,000
Rate of climb	(Sea level, normal power, takeoff weight)		3700 fpm	3140	3200
Fuel consumption	(30,000 feet, average cruise power)		1700 gal./hr.	1700	1700
Takeoff CAR runway	(Sea level standard conditions; 1,750-mile trip)		5200 feet	5500	5000
Landing CAR runway	(Sea level standard conditions; 1,750-mile trip)		5300 feet	4930	4650
Capacities	**880**	**600**			
Passengers	(Coach version 110)	(Coach version 121)	88	88	96
Payload	(Coach version 26,780 pounds)	(Coach version 29,245 pounds)	23,150 pounds	23,150	25,120
Fuel			10,770 gallons	13,870	15,110
Oil			28 gallons	28	28
Cargo capacity			863 cubic feet	863	928
Dimensions					
Overall wing span			120 feet	120	120
Wing area			2000 square feet	2000	2250
Overall length			129 feet, 4 inches	129 ft., 4 in.	139 ft., 5 in.
Height over tail			36 feet, 4 inches	36 ft., 4 in.	39 ft., 6 in.
Weights					
Maximum landing gross weight			132,800 pounds	155,000	180,000
Maximum takeoff gross weight			184,500 pounds	203,400	238,200
Maximum ramp weight			185,000 pounds	204,000	239,000
Maximum zero fuel weight			117,000 pounds	126,000	149,000

Engines	**880**	**600**
	Four General Electric CJ-805-3 jet engines, equipped with silencers and thrust reversers.	Four General Electric CJ-805-21 aft-fan jet engines equipped with thrust reversers.

Seats For 880 Club Compartment Will be Built by Chance Vought

A contract to build the club compartment seats for the first Convair 880s has been awarded Chance Vought Aircraft, Inc., of Dallas, Texas.

The order, which totals more than $300,000, includes seats for the first 40 planes, 10 for Delta Air Lines and 30 for TWA. Each club compartment contains 12 seats.

The seats, of reinforced fiber glass, are made of an inner and outer shell filled with foam plastic for extra rigidity and strength. They will be of a contoured design to complement the modern fittings of the Convair jet transport.

Basic color is snowshoe white with upholstery to be of the color scheme of each airline.

First class passenger seats for the large passenger compartments are being built by National Seating Co., Mansfield, Ohio.

Club compartment seats for plane No. 4, first plane to be fitted with seats, were due in San Diego some time this month. First passenger seats for the plane will arrive this summer.



PANELIST—R. C. Sebold, Convair vice president-engineering (center), was among experts quizzed this month at a "Meet Aviation Press" panel in New York City. General topic was "supersonic transport." Sebold said he was confident that "when we can finance a supersonic transport, we can build it."

AF Team Briefed On Cargo Version

Proposed cargo version of the Convair 600 jet transport was under consideration by a team of Air Force officers at Convair San Diego Plant 1 last week (April 23-25).

Heading the group of 28 AF men were Col. K. S. Wilson of ARDC Detachment 1 of Wright-Patterson AFB, Dayton, Ohio, chairman; and co-chairmen, Lt. Col. W. A. Harmon of the transport weapon system project office at Wright-Patterson and Col. H. C. Wilder from MATS Hdqtrs., Scott AFB.

Presentation was under the direction of D. H. Digges, in charge of the Convair jet transport program, and H. J. Richardson, chief of AF requirements, SD military relations.

Private Pilot Dies in Crash

Killed in a plane crash in Mexico April 11 was a Convair Fort Worth man who was serving as a private plane pilot on a week-end religious mission to Central Mexico.

He was Frederick M. Weaver, 34, an electronics technician in Dept. 93.

Also killed in the crash was his passenger, the Rev. Harvey E. Flowers, pastor of Revival Temple in Fort Worth.

Weaver was flying a Stinson through rain and fog and trying to follow the Laredo-Monterrey highway when the craft crashed into a mountain 40 miles north of Monterrey, Mexico.

Weaver is survived by his wife; a daughter, Linda Weaver, 15; and his parents.

DR. JAMES RYAN OF ASTRONAUTICS MEDICAL FELLOW

Election of Dr. James Ryan, Astronautics chief physician, as a fellow of the Industrial Medical Association has been announced.



Dr. James Ryan

Dr. Ryan was to receive his fellowship certificate today (April 29) at the annual meeting of the association at the Hotel Sherman, Chicago.

In announcing Dr. Ryan's election, Dr. H. W. Lawrence, association president, specified the honor was being bestowed as "recognition for outstanding work in the field of industrial medicine."

A graduate of St. Louis University School of Medicine (1940), Dr. Ryan has been with Convair since August, 1951, first as a staff physician at Convair San Diego, then as Astro's chief physician, beginning in September, 1956.

Astro Man Elected By Welding Society

Robert L. Hawkins, Astronautics factory process engineer (Dept. 758), has been elected first president of the San Diego Section, American Welding Society, Inc.

The recently-organized group has a charter membership of 89 persons interested in promoting the art and science of welding. One of the aims of the group will be to emphasize youth education.

General Office Badges Changed

General Offices salaried personnel were wearing new badges this month.

They are a white field with blue stripes slanted across the upper half. The lower half of the plate, plain white, carries the individual's name and title or group designation.

Staff executives (defined as those reporting directly to General Offices executives) continue to wear badges with a blue field marked by a horizontal red stripe.

Both types of badges entitle the holders to full entrance privilege to all Convair-owned and Convair-operated property, subject to local security regulations.



". . . and if you get thirsty during the night, just turn this."

Why Do Mercy, Scripps and Sharp Hospitals Need $10½ Million?

(Soon Convair San Diego and Astronautics personnel will be asked to contribute over a three-year period to the Tri-Hospital Building Fund which aims at raising $10½ million for vitally needed expansion of Mercy, Scripps and Sharp hospitals. Following are the answers to some of the questions that may arise.)

Question: Why is this campaign necessary?

Answer: There exists now, today, a dangerous shortage of hospital beds in the San Diego area, brought on by mushrooming population.

Q: Would the situation solve itself if we did nothing?

A: By no means. The California Bureau of Hospitals last year reported San Diego's deficiency in hospital beds was 619 and that each year need is increased by 100, as population grows.

Q: Why don't the hospitals borrow the money and repay out of profits?

A: These are "non-profit" hospitals. Although California law permits them to make up to a 10 per cent "profit" on operating income, as a practical matter they operate at a loss with the difference made up by endowments and contributions.

Q: There are privately owned hospitals that operate at a profit. If they can do it, why can't these hospitals?

A: Privately owned hospitals can make a modest profit, but to do it they cut corners on costly activities that have become an integral part of a hospital, such as research and training doctors and nurses. They must aim at the profitable types of cases and leave the expensive ones to the big hospitals. They cannot invest in expensive equipment that would have a low patient usage.

Q: If these hospitals are running in the red, why don't they raise rates?

A: They prefer not to increase the expense burden on the patient, but would rather spread the burden of the difference over the whole community, which in effect is what this funds campaign does. Whether you use them or not, it is worth a great deal to everyone in "insurance" that these hospitals exist.

Q: My community already has a fine small hospital. Why therefore should I support these big ones?

A: Doubtless the hospital you mention has an excellent staff of doctors, but it cannot possibly match those of Mercy, Scripps and Sharp in size and range of talents. Chances are that in case of a really serious illness, or when diagnosis is difficult, your specialist would require that you go to one of these three, with their vast facilities.

Q: How much will I be asked to give?

A: A day's pay each year for three years. This automatically adjusts your gift to your ability to pay.

Q: Do I pay in a lump sum?

A: No, by payroll deduction. If you make $25 a day, this is a deduction of about 50 cents a week.

Q: Is this deductible for income tax purposes?

A: It is, under both state and federal law.

Q: If I wish, may I specify that my gift go to one particular hospital, rather than all three?

A: Yes, and request will be faithfully fulfilled.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

San Diego EDITION

(Serving San Diego Division of Convair)

SD Division news office: Plant 1, Bldg. 32, ext. 1071.

Vol. 12, No. 10 Wednesday, May 13, 1959

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



CLEAN 'EM OUT—Cluttered desk drawer is symbolic of "clean up" drive on office supplies that will affect SD Division next week.

April RX Winners To Be Announced Later This Month

"Reduce Xpense" ideas are continuing to flow into the office of B. F. Coggan, SD Division manager, at a rate of 120 a day.

Coggan reported that through May 5 a total of 2,847 had been received.

"The response has been truly magnificent," he said. "I am very gratified by the volume as well as quality."

Coggan is continuing to read each one himself and is making recommendations before turning them over to cost researchers.

"I realize there must be considerable suspense as to the identity of the winners of the April $1,000 and $500 RX awards," he added. "We will be able to announce these later this month."

The RX campaign will continue through July with awards of $1,000 and $500 monthly, capped by a $2,000 grand prize at the close of the drive. All those with cost reduction ideas were advised to write them out on an ES or CIP form, include name, department number, clock number, plant number, building and column location, and home address, and mail to Coggan at Bldg. 1. Mark "RX" at the top.

* * *

Quite a number of RX ideas already have been processed and adopted. Here are three taken at random from the stack:

F. T. Lay, Dept. 279 assistant foreman, suggested that inexpensive dummy access doors be provided during cleanup of the F-106 and until regular doors are installed at a later station. They replace costly masking and will save an estimated $2,217 a year

(Continued on Page 2)

RX Ideas Need Home Address

All who submit RX ideas are requested to include their correct home address.

Addresses on file in personnel files have been used in sending out letters of acknowledgment and quite a number have been returned marked "not at this address."

"At first, we tried tracking down the individual and getting his correct home address," B. F.

Incidentally, PLEASE when sending RX ideas by envelope to Coggan's office, use only one or two staples. Those that have been stapled many times are a problem.

Coggan, SD Division manager, said. "This became so time-consuming that we had to stop. If you submitted an RX idea and failed to get a letter of thanks from me, then you will know that the address on file with Convair is incorrect. In these cases, I hope you will drop our personnel department a note and bring their files up to date.

"Meanwhile, all who are currently sending me RX ideas should write their home addresses on the suggestion forms."

880 Undergoes Landing Tests

Landing tests held recently at Convair SD showed that the 880 jet transport is able to stop in distances as short as 2,000 feet.

Plane No. 1 was put through a preliminary evaluation landing performance a couple of weeks ago to get information needed for design considerations for the Convair 600 and intercontinental 880. The 600 jet transport is due to go into production this fall with the intercontinental 880 following on the line a couple of months later.

In the six landings made by the first 880 at Lindbergh Field, the minimum ground run recorded was 2,000 ft., reported SD engineering flight test.

Further testing in landings and takeoffs will be done when

(Continued on Page 2)

Office Supply Surplus Target For Cost Drive Beginning Next Week

San Diego Division will be surveyed next week in a drive to return to stock all office supplies and equipment over and beyond current needs.

The clean-up drive is a result of several RX ideas submitted in the current campaign.

Late this week all department heads will be requested to appoint teams to canvass all offices within their jurisdictions and pick up all surplus. This means typewriters, desks, chairs, file cabinets as well as stationery, pencils, pen sets, memo pads, etc.

"The immediate saving is in space and efficiency," Dave Acker, manager of industrial engineering, said. "However, Convair has a lot of money invested in surplus office supplies that need not be tied up."

He advised the large departments to keep no more supplies on hand than enough to operate until the next requisition is filled.

"Office supplies are no small item in the SD Division," Acker continued. "Last year the cost was $71,038 a month, or $852,459 for the entire year. So far this year we are doing better, spending at the rate of $55,877 a month. But that's still a lot of money.

"Rubber bands last year cost $3,500. Desk calendars were an expense of $7,000. The division used up $2,000 in paper clips and $15,000 worth of pencils!"

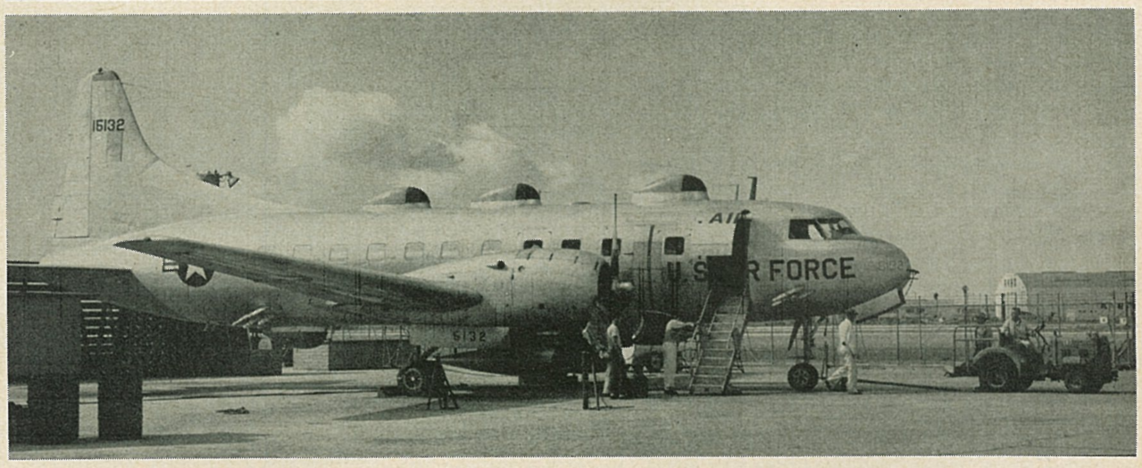
Cafeterias to Observe Birthday By Serving 40c Chicken Dinner

Just how big a meal 40 cents would buy in the "good old days" will be demonstrated to Convair SD diners next Thursday (May 21) when The Prophet Co., cafeteria operators, observes its 40th anniversary.

A full chicken dinner is promised at the same price as the going charge when The Prophet Co. entered business in 1919. The following menu will be served at all of the company's Convair installations during regular lunch periods: Spring chicken, dressing, giblet gravy, cranberry sauce, peas, whipped potatoes, tossed green salad, rolls, tea or coffee, and anniversary cake.

W. E. Rickman, supervisor of the company's Convair operations, said that the special 40-cent anniversary luncheon will be served the same day at cafeterias at SD, Plants 1 and 2, Astronautics, Pomona, and Palmdale.

At both San Diego and Palmdale special arrangements are being made to take care of the large crowd expected. Disposable plates and utensils will be used so that diners can take their luncheons to their own areas if cafeterias become overcrowded. The anniversary luncheon will be served at plant cafeterias only and not on the mobile carts at Palmdale or canteens at SD.



NEW LOOK—Humps on fuselage of first modified Convair T-29B are evidence of electronics modification of plane to airborne monitoring platform for Air Force. After initial flight testing at Convair SD, plane will go to Eglin AFB, Fla., for use over Eglin Gulf Test Range during missile tests.

High NMA Award Won by Coggan

B. F. Coggan, San Diego Division manager, was given the Gold Knight award, highest individual honor bestowed by the National Management Association, at the 11th annual Work-Wiser Conference in Long Beach, Calif.

Seventy-seven members of the Convair SD Management Club attended the conference, theme of which was "Great Issues in Modern Management."

Coggan was chosen by the Southern California Area Council of the NMA as the "outstanding figure in the management field." Larry Livers of North American Aviation, Inc., the program chairman, made the presentation.

In accepting the NMA's "Oscar," Coggan said, "Mr. Edgar Kaiser and Mr. J. H. Kindelberger received this award in 1957 and 1958; and to be considered in the same light as these two men is in itself an honor. Winning such an award is truly a group accomplishment by a fine business organization—in this case, the men and women of the San Diego Division of Convair."

Officers of the SD Management Club in attendance included Ed Caldwell, president; Paul Hamm, treasurer: Charles Shoupe, program chairman; and Board of Control members, C. F. McMenamy, B. J. Wood, L. G. Lawson, and R. L. Williams.



B. F. Coggan

Convair Loses Softball Final

Although getting only 3 hits, Anderson's Furniture dealt the Convair "A" team its first loss of the season, 3-1, in the finals of the La Mesa Invitational Tournament.

Two of the runs off Convair pitcher Art Bunge were unearned. Out of the lineup because of injuries were John Murillo, regular second baseman, and Bill Doten, regular third sacker.

But Convair bats came to life last week when they shellacked Evening Tribune, 6-1, and CSEA (Division of Highways), 8-0, in the city pre-season tourney.

In other softball activities the Convair Eagles will open the season in the ASA League May 19 at the Helix High School playground. They play Tuesdays and Fridays.

Two entries from SD departments will still be accepted for shop league slow-pitch softball. Registration must be made with Gil Crosthwaite, ext. 1245, Plant 1, before 5 p.m. tomorrow (May 14).

Ball Ticket Drawing Will Close in Week

Entries open today and will remain open until 4 p.m. May 22 for the third free San Diego Padre baseball ticket drawing at Convair SD for this season.

Sponsored by CRA, winners will receive two tickets to games to be played between June 2-14. To enter, write name, clock number, shift, department number, location and telephone number on a slip of paper and place in one of the boxes located at employee services, Plants 1 and 2; Rose Canyon: Dorothy Kniffen, Bldg. 2, ext. 2239; Fordham Street: Bessie Cooper, ext. 100; Gun Butts: field operations inspection office; Ramp: thermodynamics laboratory. Only one entry per individual is permitted.

Idea For X-Ray Earns $1,295

One of Convair SD Division's largest Employee Suggestion awards has been approved for B. J. Moore of the quality control process lab (Dept. 197-4) at Plant 2.

Moore's suggestion of improved inspection technique of F-106 missile gear legs will save the company $12,953 a year. His ES award amounts to 10 per cent of the saving, or $1,295.30 with half paid now and the balance in six months.

He recommended that the tubular assembly making up the missile gear drag arm which holds the missile under the plane be inspected by X-ray instead of the former method of destructive tests which necessarily destroyed the tubes. The five aluminum tubes which make up the assembly on each plane are worth $130 apiece while cost of X-ray inspection is only $3 a tube. Also, by use of radiographic inspection all the parts can be inspected instead of the former one in 10 ratio.

Moore had earned another ES award for $81.60 this year and three others within the last two years.

Convair Apprentices To Get Certificates At Graduation Affair

Twenty-three Convair SD apprentice graduates will receive certificates at the annual graduation dinner honoring new journeymen May 27 in the Palm Room, U. S. Grant Hotel.

The dinner is held yearly under the sponsorship of San Diego Junior College and the SD Area General Apprenticeship Committee. Approximately 180 graduates representing 21 trades will receive certificates of journeymanship from the California Apprenticeship Council and SD Junior College.

Tickets for the event may be obtained from L. W. Turner, SD educational services section, ext. 491.

Plant 2 and Astro Get Direct Dialing

Direct dialing service between the Astronautics plant and San Diego Division's Plant 2 was cut into the Astro system May 4.

From the Astro plant, dial four, then the desired Plant 2 extension. From Plant 2, dial 82, then the Astro number.

Convairiety

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego, Astronautics, Pomona, Antelope Valley-Holloman and the Mail) by Convair Industrial Relations. General Offices, San Diego, Calif., Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 65,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Blood Credit Remains in Red Despite 139-Pint Donation

Second-shift people at Convair San Diego Plant 1 will have a chance to boost SD's credit at the blood bank when the Red Cross Bloodmobile makes its next in-plant visit May 28.

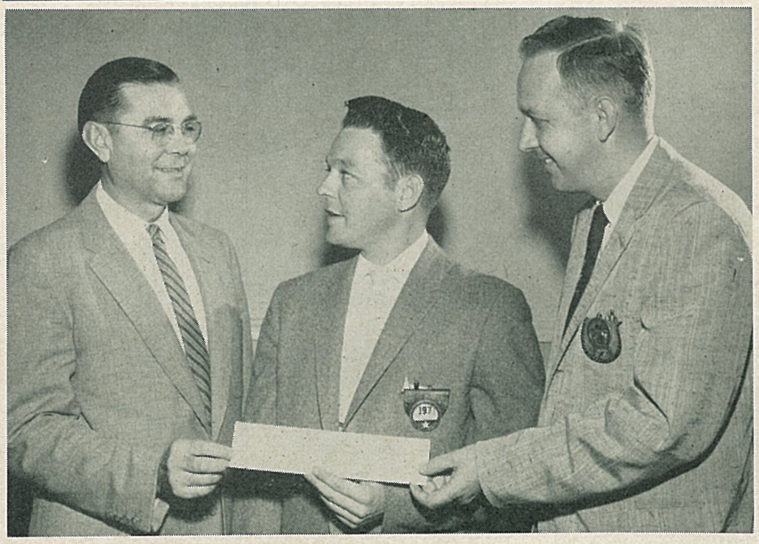
Convair's account will stand 100 pints in arrears by the end of this month, cautioned Ken Wulfemeyer of employee services, who urged as many as possible to sign up.

More than 300 volunteers will be needed to get the necessary blood supply to carry through another month, said Wulfemeyer. At least half of all who volunteer are not acceptable due to illness, eating or drinking within four hours, taking medication of some sort, or visiting a dentist within seven days before. Black coffee, tea, or water may be taken at any time before giving blood.

Of the 263 people of Depts. 6 and 31 who signed to donate blood on April 30, only 139 were accepted as donors with 81 rejected and 43 not showing up.

Convair's account with the San Diego Blood Bank can be drawn upon without charge by any SD employee or member of his immediate family up to five pints. Usual charge for a pint of blood is $34, with the blood itself costing $25 a pint and an additional $9 for service charge.

Any second-shift person able to donate blood at the May 28 date is asked to contact his supervisor.



FIRST PAYMENT—B. J. Moore (center) of Convair SD Dept. 197-4 receives first half of one of SD Division's largest Employee Suggestion awards for improved inspection technique from R. H. Gilliland, quality control manager. Looking on is G. R. Bailey, quality control lab supervisor.

Electronics Production Center To Occupy Part of SD Bldg. 4

A Convair SD electronics production center will be established some time this month on the ground floor of Bldg. 4 at Plant 1, according to SD industrial engineering setting up the area.

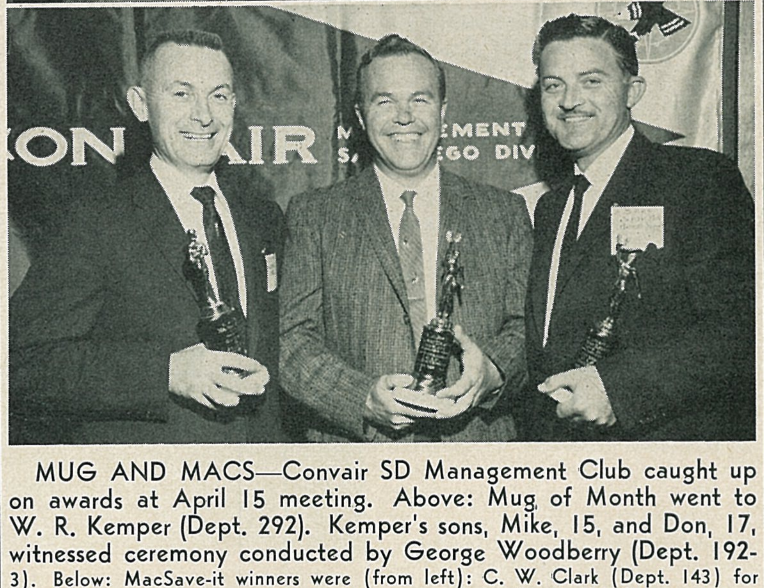
Under direction of E. W. Carlson, chief of electronics manufacture, about 60 persons will occupy 14,000 sq. ft. in the southeast corner of the building.

Astronautics shipping operations have been moved north to a temporary location at Cols. CD 13-15 for at least a couple of months until the space will be needed for a scheduled expansion of the electronics area. Further extension of electronics production floor space northward along the east side of the building is slated for the end of this year or first of next.

Of the 60 persons forming the nucleus of the new production group, about half are transfers from Dept. 31, while the rest, already in electronics, will be moved from the mezzanine of Bldg. 1.

B. L. Shaw is in charge of electrical assembly, W. S. Childs, mechanical fabrication and assembly, and K. A. Seeley, group engineer for production engineering and control.





MUG AND MACS—Convair SD Management Club caught up on awards at April 15 meeting. Above: Mug of Month went to W. R. Kemper (Dept. 292). Kemper's sons, Mike, 15, and Don, 17, witnessed ceremony conducted by George Woodberry (Dept. 192-3). Below: MacSave-it winners were (from left): C. W. Clark (Dept. 143) for March; E. E. Day (Dept. 223) for February, and R. W. Shaffer (Dept. 15-1 at time CIP was submitted) for January. Not available for picture was B. J. Wood (Dept. 93-0), joint winner with Shaffer for January award.

Astro to Build Powerful New Space Rocket

Astronautics Division has been named prime contractor by the National Aeronautics and Space Administration for Vega, a powerful new space rocket capable of putting heavy satellites, both manned and unmanned, into orbit around the earth.

It also will be capable of sending instrumented probes to the moon and planets.

J. V. Naish, Convair president, said the $33½ million contract calls for eight vehicles by the end of 1961.

NASA announced that Vega may be used as a two-stage as well as a three-stage vehicle. The former should be capable of placing a two-ton space laboratory carrying several men in a 300-mile earth orbit for several weeks.

A third stage would be added for moon and planetary probes. Convair will slightly modify Atlas as the first-stage Vega booster. The Convair-developed liquid-propellant second stage will be powered by a modified version of the 34,000-pound thrust General Electric engine used as a booster for the Vanguard satellite launching vehicle.

880 Undergoes Landing Tests

(Continued from Page 1)

plane No. 1 goes to Edwards AFB some time in July for a six-week stay. Equipment is available at Edwards for complete evaluation of the performance tests.

Until June ship No. 1 will continue in flight control systems testing from home base at San Diego.

Plane No. 3, second place in the flight test program, is being prepared for the thrust reverser test program. Following that, flight test engineers will be running power plant installation tests and performance and flight characteristic tests as required in support of plane No. 1.

By the second week in July the first 880 is expected to be through the development part of the flight test program and ready to start testing for Federal Aviation Agency requirements.

As of a week ago, plane No. 1 had been in the air 40 times, chalking up 78½ hours flight time, while No. 3 had made its 19th flight totaling 44½ hours. The complete flight test program on the three test 880s will add up to 675 hours with the third plane, No. 4, due to enter the testing program this summer.

April RX Winners To Get Word Soon

(Continued from Page 1)

in time and materials.

Albert A. Marks, Dept. 223, suggested wire mesh screens for trays in Plant 2 aging furnace to keep small parts from falling through. Saving was estimated at $1,010 a year and Marks was voted a $101 ES award.

T. M. Edwards of Dept. 292-4 qualified for an ES award of $169.90 with his suggestion for using a subcontractor's truck instead of public carrier in returning dummy windshield plates. Total year's saving was estimated at $1,699.

Naish Will Present President's Award

A full slate of activity is planned at tonight's (May 13) meeting of the Convair Management Club in the Caribbean Room, El Cortez Hotel.

President J. V. Naish will present the annual President's Award; A. C. Esenwein, executive vice president, will discuss "Cost Reduction Suggestions" in his first appearance before the SD group; scholarship winners will be introduced and club election results revealed.

Last of 600 Mockup Components Will Be Mated Next Week at SD

Exterior configuration of the metal mockup for the Convair 600 jet transport, sister ship to the 880, will take shape next week as the last major components, the aft fuselage, overwing barrel and underwing canoe, are swung into place.

Mating of the 600 mockup began last month, just a year after the 880 metal mockup was completed, in April of 1958. The mockup of the 600 stretches down the aisle in front of the 880 mockup in the northeast section of Bldg. 3 at Convair San Diego Plant 1.

Installation of proofing items will begin the last of this month in the forward fuselage and left-hand wing, said Lee House, general foreman of proofing mockup. First to go into place will be the instrument panel, controls, and equipment in the cockpit. Then the miles of electrical wiring, cables, and tubing will be precision fitted into the hollow fuselage and wing to check out design before an actual 600 jet transport goes into production.

"The wiring of the 600 will be completely different from that of the 880," explained L. W. Stamper and W. M. Basile, mockup foremen, "although there will be some common routing of harnesses. We hope to be able to use common tubing in the cockpit, but until we get into installation work, we won't be sure just how much of our experience on the 880 can be put into use on the 600."

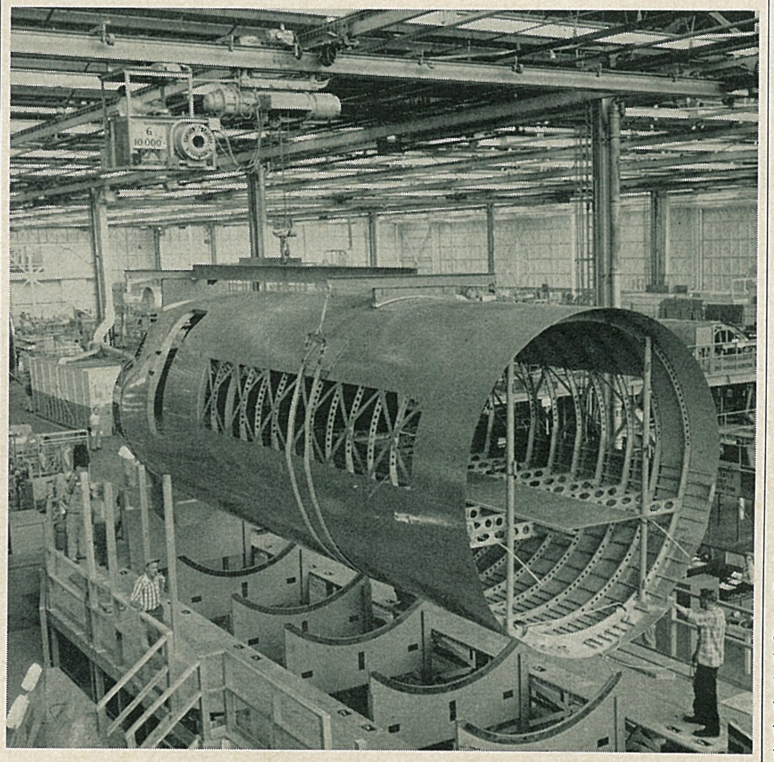
For the last three months a proofing mockup crew has been proving out structure on a skeleton right-hand 600 wing to reduce the time element when installation of items begins on the mockup itself. As the problem area concerns the section of the wing around the leading and trailing edges, work was done on the front and rear wing spars to check out engineering design of ducting, controls, tubing, and harnesses.

The 600 mockup will look a little more like a real plane than most Convair mockups as reject projection skins have been used when they could be reclaimed from salvage. All critical areas will be opened for accessibility.

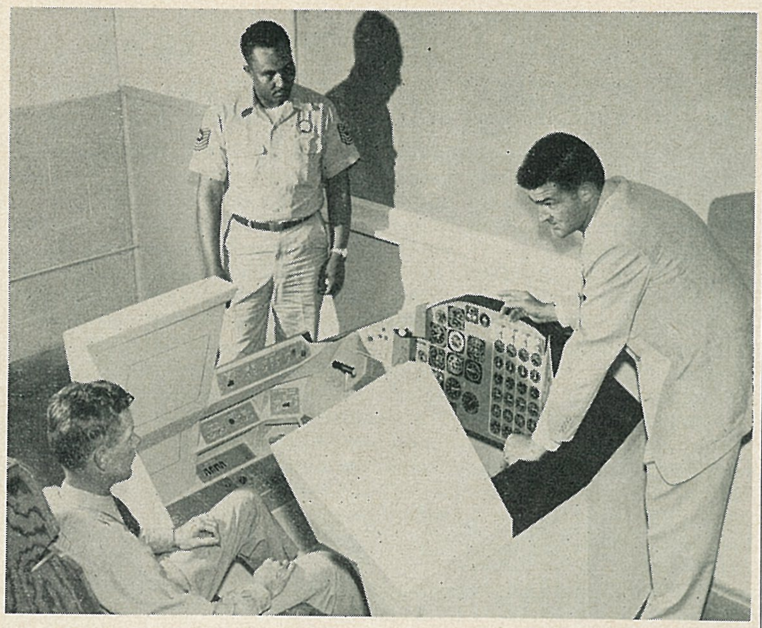
Pre-fabrication of harnesses and equipment items such as valves, regulators, electronic components is now under way. All low-cost items needed for mockup construction will be requisitioned from production while the uncommon and expensive parts peculiar to the 600 will be furnished by Depts. 110, 280, 180, and 31 at San Diego.

The present 880 metal mockup will be changed over this summer for the intercontinental 880 mockup, necessitating a 30 per cent change of proofing items. By August of this year both the 600 and intercontinental 880 mockups will be in work at the same time, said Stamper. He estimates that it will take about 120 days to complete the mockups from the time installation is begun.

During the peak period this summer, over 200 men will be working in the two mockup crews. Some of the men will be drawn from the production crews for training.



INTO PLACE—Metal mockup of Convair's 600 jet transport begins to take shape in Bldg. 3 at Convair SD Plant 1 as forward fuselage and left-hand wing have been put in place. Final components are due to be mated next week and mockup installation slated to begin this month.



GROUND "FLIGHT"—V. L. Patterson, right, of Convair Fort Worth's customer service, instructs Capt. B. H. Ford, seated, and M/Sgt. J. T. Gaskin, center, on operations of B-58 pilot panel. Mockup was made at savings in time and money by industrial design engineers in furnishings.

Cardboard Cabin of B-58 Inexpensive Training Aid

Convair Fort Worth has now cranked "3-D" into its customer training program.

The 3-D is short for a new three-dimensional training aid which can give an Air Force pilot the "feel" of the B-58 cabin without tying up an airplane or equipment costing many thousands of dollars.

The new type cardboard mockup is used by educational services to depict the first, second and third stations of the supersonic B-58 Hustler.

The special cardboard training aids are the first of their kind to be used to train potential B-58 pilots. Actually they are put together in a much shorter time and at much lower cost than regular wooden types.

For example, two people can build a cardboard aid in three days, but it takes five people three weeks to construct the wooden type.

C. B. Cooper of furnishings first came up with the cardboard idea about four years ago.

Now furnishing's industrial design engineers, better tagged as "cardboard sculptors," create the aids from layouts.

Industrial design is one of five units in furnishings. The other units are human factors, instruments, escape systems and furnishings installations.

'Soviet Air Power' Will Be Subject at Next IAS Gathering

Maj. Robert Crawford, USAF, will discuss "The Rise of Soviet Air Power" May 19 at 8 p.m. when he addresses members of the Institute of Aeronautical Sciences in the Bldg. 14 auditorium at Convair SD, Plant 1.

Crawford will review the growth of the Russian Air Force through research and development programs during the past decade. He will also show a film and slides dealing with the subject.

He is presently the Staff Intelligence Officer at the Air Force Flight Test Center, Edwards Air Force Base, Calif. Crawford has worked closely with the Advisory Group for Aeronautical Research and Development of NATO since its inception in 1951.

Halnan, Long-Time Convair Man, Dies At Daingerfield

J. E. (Jim) Halnan, Convair Daingerfield manager of accounting and material, died this month at Daingerfield's Hospital in the Pines.

He joined Convair San Diego in 1940 as a timekeeper in the accounting department and in 1944 was made division controller at the Tucson Division, later serving in the same capacity at Consairway Division.

After Consairway closed, he was moved back to San Diego as staff assistant before being transferred to Convair Daingerfield as manager of accounting and material.

Born in Oakland, Calif., he is survived by his wife, Mrs. Bernice Halnan of Lone Star, Texas.

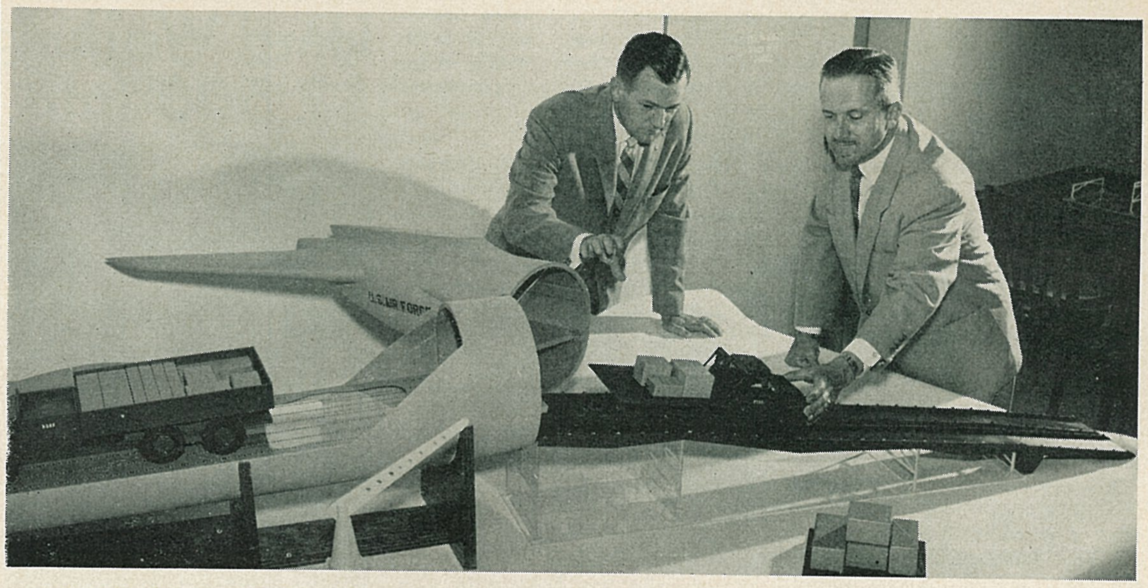
Three-Day Weekend In Store for Convair

Convair people at all divisions will have an extra day off this month over the Memorial Day holiday when Friday (May 29) will be observed as the holiday which falls on Saturday.

Only those persons performing essential maintenance and industrial security functions will be required to work on Friday.



CHECKED OUT—J. A. Hitch (second from left), Convair SD technical representative at George AFB, Victorville, Calif., congratulates three Navy pilots from North Island and Miramar Naval Air Stations at San Diego who checked out recently in F-102s. From left they are Lt. Robert Plowden, 329th FIS chase pilot; Hitch; Lt. Cdr. W. E. Gildow of Miramar; Lt. Niels Nielson and Lt. Don L. Hall, both of North Island; and Maj. Z. T. Forester, 329th operations officer.



SWING-TAIL VERSION—H. J. Richardson, chief of AF requirements of Convair SD military relations, and B. J. Simons, SD chief project engineer-transport aircraft, examine model of Convair 600 cargo version on display for AF evaluation recently.

Lanphier Called Missile Age Exec. In Upcoming Esquire Article

T. G. Lanphier Jr., Convair vice president and assistant to the president, is portrayed as the front-running "Missile Age Executive" in a story that will appear in the June issue of Esquire magazine.

Written by Peter Maas, the article quotes Lanphier as advocating a 30 to 50 per cent step-up in defense efforts. "The danger is that the Soviets will soon believe they can move against us politically without getting hurt."

Convair is called "the first of the so-called airframe manufacturers to have long-range planning placed on an executive level . . . concentrated on massive retaliatory weapons as Atlas and Hustler."

Lanphier's role in the production of the B-58 Hustler, Atlas, and F-106 programs is also discussed. The magazine goes on sale May 19.



FEATURED—Tom Lanphier Jr., pictured with F-102s in background, will be featured in Esquire magazine article.

SQUADRON OF F-102S SETS A DOZEN NEW RECORDS AT TYNDALL

A fighter-interceptor squadron from Portland AFB, Ore., flying Convair-built F-102s, broke all possible records in evaluation maneuvers at Tyndall AFB, Fla., recently.

The 460th FIS, first of more than 20 squadrons to go through evaluation tests at Tyndall, set 12 new records in their month's maneuvers as well as new speed records going and coming.

They set a new record for formation flight of F-102s from Portland 1,500 miles non-stop to Oklahoma City en route to Florida. While at Tyndall they fired the greatest number of Falcon missiles in the shortest time without mechanical failures, scored the highest number of intercepts and tied for the record of the greatest number of aircraft firing live missiles.



MIRACULOUS—Judson T. Bland (Convair SD Dept. 25-1), a retired submariner, points out main hatch on model of USS Squalus. Bland was rescued from sunken submarine after 34 hours on floor of ocean.

20 Years After

Survivor of Squalus Recalls 34 Hours Spent on Ocean Floor

A retired U. S. Navy submariner, now working at Convair SD, this month will celebrate the 20th anniversary of a "miraculous escape" from a submarine that lay inoperable on the floor of the Atlantic under 247 feet of water.

Judson T. Bland, an electrician in Dept. 25-1, is one of 33 survivors of the USS Squalus, accidentally sunk during a high-speed test dive off the New Hampshire coast May 23, 1939. Twenty-six lives were lost.

"As we started the dive the after portion of the ship flooded," Bland recalled. "We started going down stern first. Twenty-six crew members in the after-compartments drowned."

(A Board of Inquiry later ascertained that the accident was caused by a faulty valve on the main induction tube that normally supplied air to the ship's diesel engines. The 16-in. tube flooded and the crew was unable to get the inside valves shut.)

"As we started going down I feared we would sink into depths deeper than that for which the submarine had been designed. If we did I knew we would be crushed flat by the pressure.

"Fortunately, we settled right-side-up on the ocean floor with a soft nudge that was hardly noticeable. The water was 247 ft. deep, safely within the pressure range the sub could take," Bland said.

"We released our marker buoy and fired smoke bombs from the ocean floor and then we started waiting."

Before commencing the dive, the submarine had conformed with the standard naval procedure and notified its sister ship, the USS Sculpin, of the planned maneuver. She in turn, after not hearing from the Squalus after one hour started searching for her.

After a two-hour interval the submarine rescue ship, the USS Falcon, pulled anchor from her berth in New London, Conn., and proceeded to the area where the marker buoy had been found by the Sculpin. She arrived at the scene 22 hours after the submarine had been reported lost.

"We knew we had been found, having made contact with the Sculpin by means of the telephone located in our buoy," Bland said. "However, the telephone cable snapped only a minute or two after we made contact. We then tapped our messages with a hammer."

"Seventeen men were crowded into the compartment I was in. The air steadily grew less breathable, even though we had scattered soda lime on the deck to check the spread of carbon dioxide."

Bland said the rescue of the submariners was "miraculous."

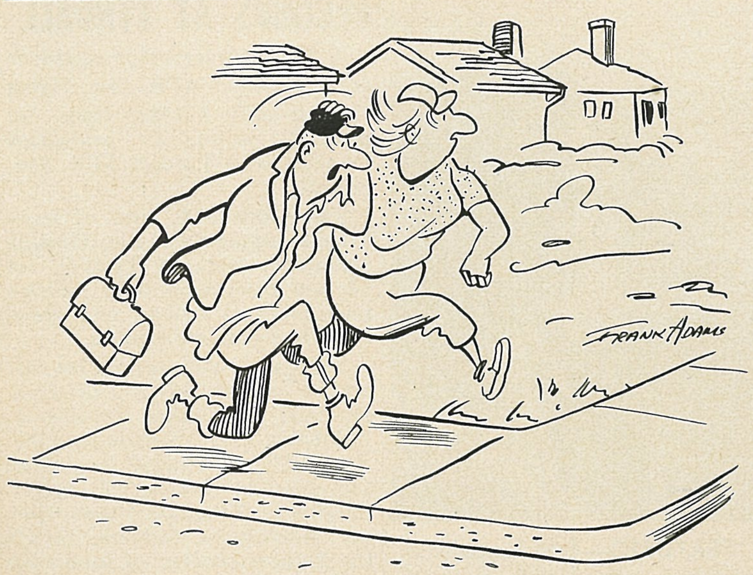
"If the seas had been rough, or if we had not settled right side up on the ocean floor, the rescue would have been impossible. As it was, this was the first time (other than a drill) that a rescue bell was successfully used to get personnel out of a sunken sub."

The bell, dropped over the side of the rescue ship, made four trips to the submarine. Each time she returned to the surface with her human cargo, making four trips in all. Thirty-three men were saved.

The bell landed on the main hatch of the submarine and "sealed" itself to it, by equalizing the pressure in the bell to that of the submarine. The sub hatch could then be opened.

Bland said he spent about 34 hours on the floor of the ocean.

"I consider myself a very lucky man to be alive today," said Bland, who has been with Convair SD for almost four years. "The same year as the Squalus tragedy another of our submarines sank approximately in the same area. The entire crew was lost. In this case the sub was an older boat. It is believed she buckled under the pressure."



"These buses would be okay if you could depend on 'em, but once in awhile they run on schedule!"

Lombard Named To Post at SD For Assist Work

Two members of the Pomona Division long range planning department have received new assignments in connection with the inter-division assist work program at Pomona, C. F. Horne, vice president and division manager, has announced.

George E. Lombard has been appointed resident program administrator for Convair Pomona in San Diego. He will provide services relative to inter-division assist work between Convair divisions in the San Diego area and Pomona. He will have an office either at the San Diego or Astronautics plant, with the exact location to be announced later.

J. Carrol Wilkinson has been appointed customer requirements representative for inter-division assist work. His duties will include making arrangements for additional assist work from Convair divisions in the San Diego area and Fort Worth.

Lombard was formerly supervisor of program coordination, and Wilkinson was supervisor of test equipment for the department. In their new assignments both men will report to H. C. Chambers, administrator of customer requirements — sub-contract section.

Convair Men Elected By Budgeting Society

Three Convair men were elected to important posts by the San Diego Chapter, National Society for Business Budgeting, at an April 20 meeting.

John B. Morgan, chief of off-site accounting at Astro, was named president. New vice president is Robert J. Schier of the budget section, Convair San Diego. James R. Herbig of San Diego Division was named a member of the chapter's council.

44-Year-Old Hand Tools Still Doing Job at SD

A Convair SD man is doing metal work with the same handmade tools he used nearly half a century ago to shape Rolls Royce fenders by hand.

Emil Heckman (SD-Dept. 101), who has been with Convair for over 27 years, is still using two handmade hammers and a pair of steel snips of file made for him in 1915 when he first started his trade of metal work.

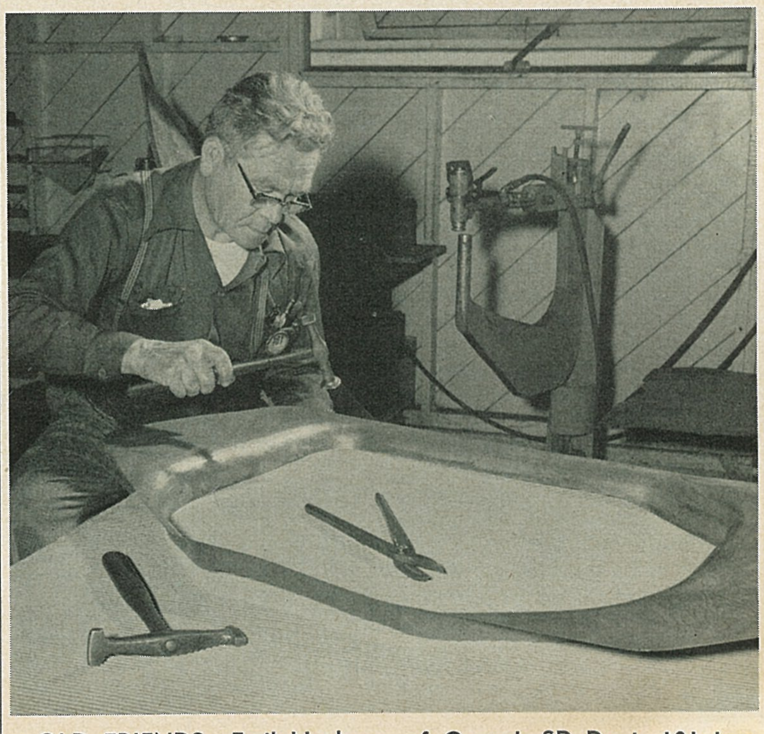
The two hammers have seen such hard usage that they have had to be welded a couple of times. The head of one hammer has been worn down from its original half-inch thickness to about one-eighth of an inch. The original hickory handle is still intact on one of the hammers while the handle of the other was replaced 30 years ago.

Heckman also uses his own steel dolly block which he designed and made to fit into different shaped tooling parts.

A native of Finland, he came to this country when he was 18 and took training in a New York trade school. He went to work first for the Walker Wells auto body shop in Amesburg, Mass.

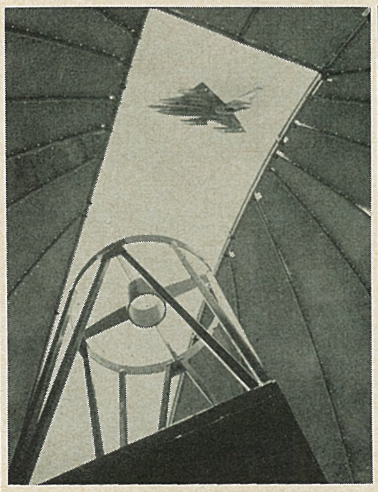
For the next 15 years he helped make bodies for the first custom-built Pierce Arrows, Rolls Royces, and Franklins. He switched from the automobile to aircraft industry in 1928 when he joined U. S. Aluminum and Hall Aircraft.

In January, 1932, he started with Consolidated Aircraft at Buffalo as a machine bumper and moved to San Diego with the company in 1935. He has been in sheet metal ever since, now working in the Plant 1 bump shop as power hammer operator.



OLD FRIENDS—Emil Heckman of Convair SD Dept. 101 taps out proper contour of parts with handmade hammers he has used since 1915. In foreground is pair of metal snips of file made for him when he started trade over 40 years ago.

Hard Working Astronomers Convert $2,500 Into $25,000 Observatory



QUICK LOOK—Camera captures B-58 as it passes over observatory.

Eighty-five members of the CRA Astronomy Club at Convair FW, thanks to their own hard work, will soon be using a 19-in. Cassagrainian telescope, valued somewhere between $25,000 and $35,000.

Total cost to CRA was $2,500! Recently dedicated, work started on a volunteer basis 15 months ago. Members spent 500 manhours grinding and polishing the 19-in. primary mirror. Over 4,000 manhours have gone into construction of both scope and dome house.

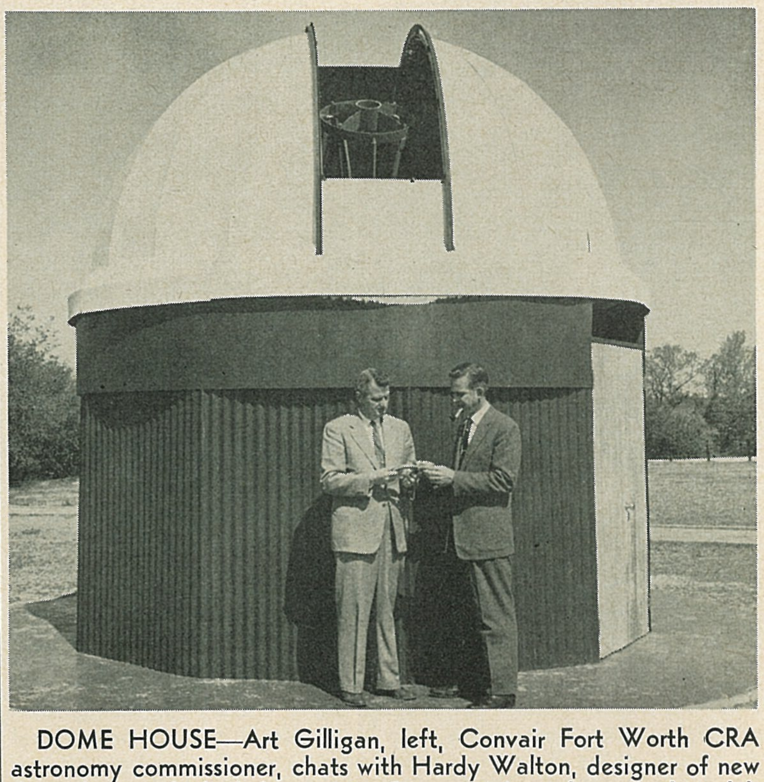
With a maximum image of 4,080, the scope's most efficient power is 1,587. Length is eight feet.

"After it's finished (in July or August), a person will be able to see as well through our scope as he can with the 200-in. reflector at the Mount Palomar Observatory in California," Art Gilligan, CRA commissioner, said. "Although, of course, the Palomar installation can reach much farther out in space."

When the scope becomes operative, it will be made available to the general Convair public one night each week.

Gilligan said a closed circuit television will be added later for use in classroom instruction.

The CRA project will get national recognition in June when the National Industrial Recreation Association magazine, Recreation Management, publishes Commissioner Gilligan's story, "Astronomy Scores at Convair Fort Worth."



DOME HOUSE—Art Gilligan, left, Convair Fort Worth CRA astronomy commissioner, chats with Hardy Walton, designer of new dome house which shelters 19-in. Cassagrainian telescope that club members have been working on for past 15 months.

Swissair and SAS Men Visit at SD

A group of 15 representatives from Swissair and SAS were at Convair San Diego last week for a two-day familiarization program on the Convair 880.

Heading the SAS delegation was B. Holmer, manager of development engineering. The Swissair group included E. Bertoni, assistant vice president of engineering and manager of aircraft projects; A. von Tscharner, manager of flight operations; Horst Baer, chief of maintenance training; Frank Roth, chief engineer, and W. Schurter, assistant chief engineer.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Ltd. of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N.Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N.J., electric motors, generators.

* * *

Dynamics Will Sponsor Disneyland Submarines

NEW YORK—General Dynamics Corporation, builder of the world's first atomic submarines, has announced an agreement with Disneyland, Inc., to sponsor the "Submarine Voyage" at Disneyland Park in Anaheim, Calif.

As part of the corporation's program of broadening interest in the world's oceans, Dynamics is joining Disneyland in presenting to the public a realistic submarine cruise that will simulate a run under the polar ice cap, as well as passage through the seven seas of the world. A touch of fantasy will be introduced as the submarines pass through the "Graveyard of Sunken Ships," and the "Lost Kingdom of Atlantis."

The new attraction will be formally opened to the public on Monday, June 15.

The eight self-propelled submarines, to be named after atomic submarines of the United States Navy, will be fully air-conditioned and will each be able to accommodate 40 passengers. The Disneyland "ocean" in which they will cruise will be made up of nine million gallons of fresh filtered swimming pool water, about equal to the capacity of 360 backyard swimming pools.

The General Dynamics "Submarine Voyage" will be featured on the American Broadcasting Company's special Disneyland television program June 15 from 7:30 to 9:00 p.m.

Electric Boat to Build Models Of 20,000-Ton Tanker Submarine

GROTON—A contract has been awarded to Electric Boat Division for preparation of drawings and testing of models of a 20-knot, 20,000 deadweight-ton, nuclear-powered submarine tanker, Clarence G. Morse, Maritime Administrator, U.S. Dept. of Commerce, announced.

Electric Boat has made feasibility studies of a submarine tanker for the Maritime Administration. These studies recommended that further experimental hydrodynamic research be conducted to ascertain the best proportions for the hull forms and to obtain a more accurate estimate of controllability.

The $37,681 contract provides that drawings are to be made of vessels having varying beam/depth (horizontal/vertical) ratios, and that models will then be designed by Electric Boat and then tested at Stevens Institute of Technology using the various ratios and different configurations to determine optimum controllability and minimum resistance.

Previous studies made for the Maritime Administration by Electric Boat have shown that a 20-knot, 20,000 D.W.T. nuclear submarine is feasible from an engineering standpoint.

Stromberg-Carlson Making Ear Study

ROCHESTER — A quality analysis of ear defenders for the U. S. Army Signal Equipment Support Agency, Fort Monmouth, N. J., is being conducted by General Dynamics Corporation's Stromberg - Carlson Division.

Part of an overall standardization program by the Signal Corps, this psycho-acoustical study is being conducted under a subcontract with Lehigh Engineering Associates.

Different types of ear defenders are being evaluated in Stromberg-Carlson's Acoustical Engineering Facility of the Special Products Division. The ear cushions are worn by servicemen subjected to high intensity sound generated in such places as jet engine run-up areas, helicopters and tanks.

Dynamics Advertising Manager Announced

NEW YORK—John L. Lowden has been named advertising manager for General Dynamics Corporation, Homer H. Evans, director of advertising, announced.

Before joining General Dynamics Lowden was connected with Erwin Wasey, Ruthrauff and Ryan, Inc., advertising agency, as account executive. Before that he had served in various capacities in Washington, D. C. and in San Francisco for the Campbell-Ewald Company.

A graduate of the University of Nevada, he is a native of Walla Walla, Wash.

GENERAL ATOMIC WORKING ON ORION

SAN DIEGO—The concept of a thousand-ton "Space Platform" propelled by controlled nuclear explosions which was discussed by Roy W. Johnson, Director of the Advanced Research Projects Agency, before the Senate Space Sub-Committee on March 26, referred to "Project Orion" which has been under way for the past nine months at General Atomic Division.

This is the first time the Department of Defense has permitted identification of "Project Orion."

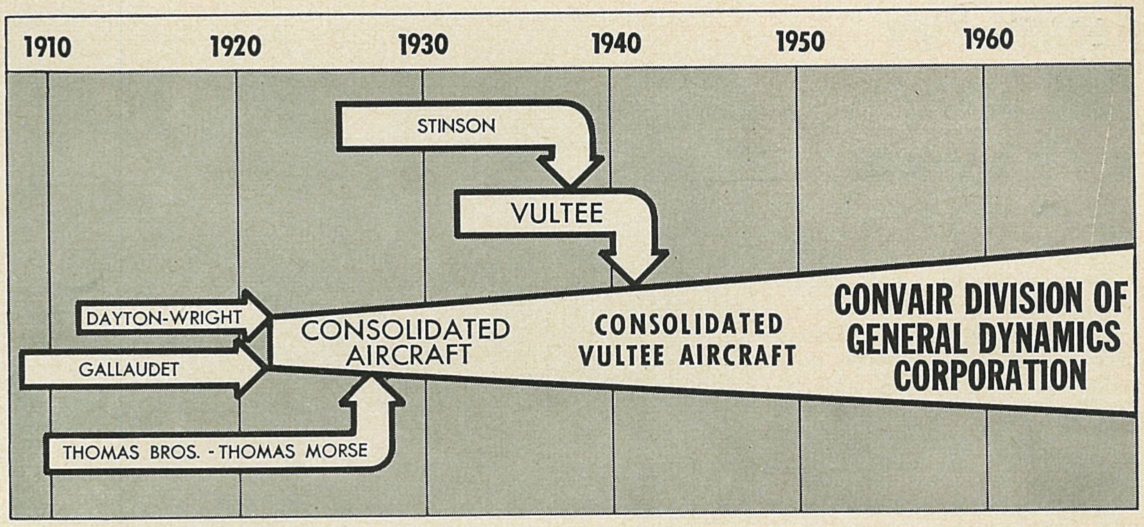
Project Orion is a feasibility study, conceived by the scientists of General Atomic, and initiated in July, 1958, under contract with the Air Research and Development Command of the U.S. Air Force with the authorization of ARPA.

The research is being conducted at General Atomic's John Jay Hopkins Laboratory for Pure and Applied Science.

Polaris Submarine Launching June 9

GROTON—The nation's first submarine designed to provide the 1,500-mile Polaris ballistic missile with a mobile underwater launching platform slides down the building ways on June 9 at Electric Boat division.

The George Washington is a 380-foot, nuclear-powered submarine of about 5,400 tons light and 6,700 submerged. It has vertical tubes for firing the solid-fueled Polaris missiles from the ocean depths or on the surface, and will be complemented by a torpedo-firing system for attacking surface ships or enemy submarines.



A REPEAT—Sketch above is a "repeat" in Convairiety. It was carried previously in Feb. 4, 1959 issue, illustrating first of series of articles tracing history of Convair. It is carried again today as a "refresher." History has progressed thus far to 1923 creation of Consolidated.

K. J. Bossart Honored By AF Association as 'Science Man of Year'

Karel J. Bossart, assistant to Convair's vice president - engineering, has been accorded another top honor.

California Air Force Association this month named Bossart its "Man of the Year in Science" during a state convention in Sacramento.

In announcing the presentation, James Snapp, California AFA wing commander, said the new award, being presented for the first time this year, was in recognition of: "The culmination of many years of determined effort to create a successful ICBM for the United States."

Last year Bossart was singled out to receive the Air Force Exceptional Civilian Service Award. The award was presented during Astro's Open House ceremonies.

Wife, Children Escape Injury in Tornado

Quick thinking on the part of an Astronautics wife in the Orlando, Fla., area probably saved the lives of four members of her family when a tornado struck the Azalea Park area.

Joyce Bagwell, whose husband, Barry, is a Dept. 571-1 man at AMR, was at home with her three children when the winds struck. She gathered the children in a closet and huddled there while parts of the house were carried away. Miraculously, they escaped unhurt.

CORNELL TO SPEAK FOR SUPERVISORS

C. D. Cornell, special assistant to the vice president and division manager at Convair Pomona, is scheduled to appear on the program of the annual Industrial Supervisors' Conference May 16 at Mt. San Antonio College. He will speak on "Communication in Industry."

Engineers Lovable, But— In Reuben Fleet's Eyes

(Following is eighth installment in continuing history of Convair, tracing concern from its earliest "tributaries," Gallaudet and Dayton-Wright.)

Reuben H. Fleet's instinct was always to simplify designs and make the product safer. Throughout his career he carried on a running battle with his engineers, whom he regarded as lovable and indispensable fellows, but not practical.

The campaign for simplification started soon after the founding of Consolidated Aircraft in 1923 when the plant at East Greenwich, R.I., was working on a contract to build 20 TW-3 trainers, a task inherited from the defunct Dayton-Wright firm. The major was particularly indignant over the elaborate 12-sided radiator core specified for the TW-3. It had to be built of hexagonal brass cartridge tubing, all fitted and dip-soldered. Total cost of the first core was $564, and it leaked under pressure of only one pound (it was required to withstand more than three).

Fleet stayed at the plant one night and worked out a simple radiator of his own design, using a wood packing box for size. He cut a series of holes to let the box fit over the propeller shaft in various positions. He studied the best positioning for visibility from the cockpit, while his 10-year-old son, David, stood on a ladder and moved the box.

The shop was ordered to build a simple core to fit Fleet's pattern. This was quickly done. Under test, the core withstood five pounds' pressure without leaking. While this was going on, an engineer wrote the Air Service that Fleet was cheapening the product. I. M. Laddon, at that time chief of Design Branch 2 in the Air Service's engineering division, (later to have a long and distinguished career with Consolidated and Convair) was dispatched from Dayton to investigate the complaint.

"I told Laddon that if the government wanted to go on paying $12,500 for trainers ad infinitum, it could," Fleet has recalled. "But this was only an experimental order for 20 planes, so why not see if we could improve things?"

Laddon's investigation showed that the simpler radiator worked, and he recommended that the modification be accepted. In the same fashion, Fleet got rid of engine hoods, which were expensive to make (they required the fashioning of more than 100 louvers) and blocked the view the pilot otherwise had through the engine "V." Consolidated trainers were built for years without engine coverings. This was one of the reasons the cost was down to $6,000 by 1927.

Fleet developed one of his principles of safe construction while standing in a corn field between Buffalo and East Greenwich. He had been flying along in a trainer when the control stick suddenly jerked to one side. The right aileron was fluttering loosely. The major managed to land. Inspection showed a clevis pin holding an aileron hinge had dropped out because of a worn fitting. He noticed that the elevators and rudder, like the ailerons, were suspended by only two hinges. Loss of a pin from any one could lead to a crash.

"I repaired the plane and managed to take off from another field, but first I went to the nearest telegraph office," Fleet has said. "I wired the plant to start using three-point suspensions on every movable control surface. Also, to fasten them with shoulder bolts, castellated nuts and cotter keys. After that, nobody ever lost a Consolidated plane because one hinge failed."



WITH PT-1—This 1925 photo shows, from left, late George Newman Sr., then Consolidated works manager; Ray Whitman, then chief of inspection, now Bell Aircraft executive; late Tom Kenny, treasurer; late Col. V. E. Clark, chief engineer; R. H. Fleet, Consolidated president, now retired; J. L. Kelley, then Air Service plant representative, now Convair executive; K. B. Wolfe, then 1st Lt., recently retired as major general; late Carl Cover, test pilot; Ralph Royce, then a captain, now retired general. Note PT-1's lack of engine cover (see story).

Keglers Play Final Games In SD Leagues

Winter bowling leagues at Convair SD one by one are finishing their long schedule of activity.

Final results have been tallied in the following leagues:

CONVAIR JET 700 — Analoggers ended in first place with record of won 71 and lost 49, closely followed by Alleycats with slate of 69 and 51. Thermites and Mickey Mouse Club finished third and fourth.

Individual winners were: HMG, Richard Hanson, 265; HMS, Merl Cornish, 626; HWG and HWS, Doris Scheib, 213, 561; HMGWH, Hanson, 292; HMSWH, Howard Paynter, 707; HWGWH, Jeanne Kelly, 250; HWSWH, Doris Scheib, 648; HTG and HTS, Thermites, 912, 2515.

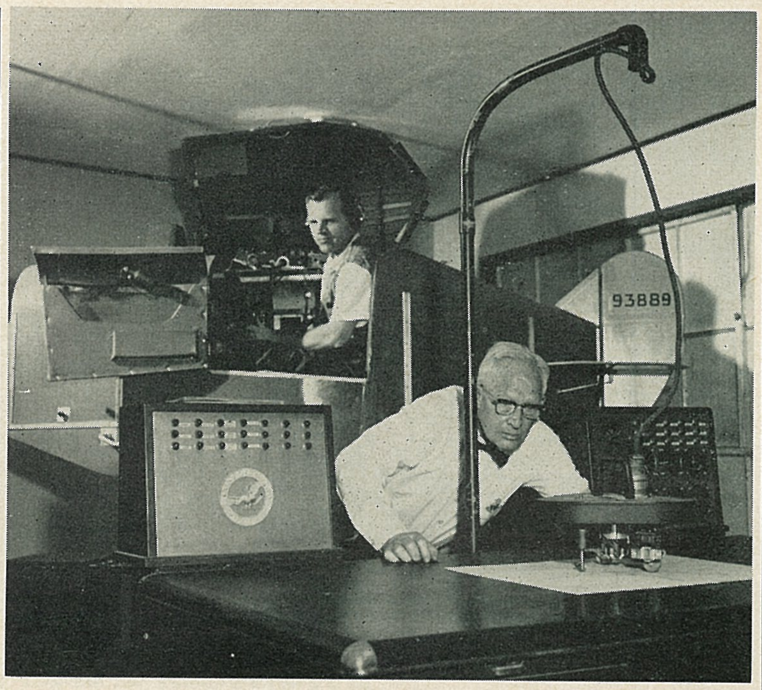
CONVAIR WHIRLAWAY — Top bracket went to Christie's who edged second-place Hoot Mons. Pogo Sticks, Silver Jets, and Comets placed third, fourth and fifth.

HIG winner with score of 257 was Jack Meller. Others included HIS, C. C. Adams, 656; HTG, HTS, Christie's, 1000, 2789; HWG, Terry Slawson, 240; HWS, Kay Turner, 555.

CRA ENGINEERING—Tigers led the procession of top five teams that included Prods, Odbals, Dest'neers, El Bandidos. They also took HTS honors with score of 2825.

MIXED MASTERS — Second place Model Shop ended four games behind pace-setting Dreamers. Deltas, Pin Chips and Screwballs rounded out top five. Individual winners: HIG, M. Murison, 263; HIS, J. Adams, 658; HTG, HTS, Dreamers, 928, 2538; HWG, Helen Belland, 246; HWS, Marilyn Louder, 576.

JET LINER 700 — Tornados and Rockets finished one-two. Glo-Worms and King Pins tied for third. HIG honors went to E. Leithoff, 233; HIS, B. Penneman, 604; HTG, Pin Splitters, 870; HTS, Glo-Worms, 2460; HWG, Jan Penneman, 204; HWS, Clare Hamman, 529.



FINISHING TOUCHES—Link trainer now being installed at Jim's Air Service, Lindbergh Field, is expected to be ready for use late this month. W. M. Chatfield, Dept. 6 (in foreground), and V. E. Korski (Dept. 6) are doing most of setting-up work.

Installation of CRA Link Trainer Near Completion at Air Service

Installation of a CRA-owned Link trainer at Jim's Air Service, Lindbergh Field, is expected to be completed late this month.

"All Convair SD flying enthusiasts, who have already received their private pilot licenses, will be eligible to use the Link to get their instrument ratings," J. K. Field, SD chief of employee services, said last week.

A regular schedule of instruction and class hours will be mapped soon, Field said. Prices will be chopped in half. One-hour lessons will cost $5. One-half of the hours required for instrument accreditation by the FAA can be taken.

Installation at its new location, directly adjacent to the Solo Flyers classroom, will involve roughly 40 manhours. A section of the wall was cut out to get the Link into the room. Victor Korski (Dept. 6), with the assistance of W. M. Chatfield (Dept. 6), is doing most of the setting-up work.

The Link simulates actual flight conditions in almost every respect. Problems are fed into the mechanism by the instructor, compelling the student to take the proper action to get out of a "jam." A recorder traveling over a desk traces an inked path of "flight" (showing speed, distance covered, etc.)

Volleyball League Winners Decided

Volleyball competition came to a close last week with Structures lodged on top of the American League and Industrial Engineering ranked first in the National League.

Structures ended season play with a perfect slate of six victories against no defeats, followed by Dept. 3, Dynamics, and Dept. 280. In the National League, Industrial Engineering was dealt one loss in six contests, with Parts Sales placing a close second. Dept. 603 and Manufacturing Control were ranked third and fourth.

The league leaders met in a final play-off game last Friday.

47 SD Rockhounds Attend Boron Trip

Forty-seven people, one of the largest groups ever to make a rockhound expedition at Convair SD, journeyed to the Boron area near Edwards AFB last month, Danny Whorton, commissioner, reported.

An abundance of mineral specimens was found. Included were petrified palm, petrified wood, agate, jasper, and common opal.

Baseball Discount Offered SD Fans

Discount tickets to Padres home baseball games on May 27 and June 3 are now on hand at Convair SD employee services at both plants. The tickets are good for a 50-cent reduction on either the reserved or general admission price when presented at the Padre box office.

Color Guard Needs Riders With Horses

If you own a horse and like parades, Convair SD's Riding Club has just the opportunity for you.

Openings now exist on the club's color guard, which has won numerous awards and makes frequent appearances in parades and other civic observances. Uniforms are furnished by the Riding Club.

Palominos, dark - colored horses, or chestnuts are preferred. Any interested parties should contact color guard member, Luke Barbour, HO-6-6536 or ext. 610, Plant 2.

Log Book Entries

Promotions

SAN DIEGO

Promotions to or within supervision effective April 27.

Dept. 6-51, Engineering: To senior furnishings group engineer, L. C. Beckett. To senior propulsion group engineer, J. B. Hurt. To senior propulsion fluids group engineer, G. Karel. To senior air conditioning group engineer, D. Krause. To senior electrical group engineer. B. B. Shaffer.

To senior hydraulics group engineer, H. E. Wright. To senior specifications group engineer, V. S. Mathews. To senior controls group engineer, R. H. Ridnour. To chief of product support design, C. S. Brandt.

To furnishings group engineer, C. L. Brockman, J. J. Herring, R. F. Shard. To propulsion group engineer, P. W. Corbett, J. T. Rudis, G. E. Trimlett. To loft group engineer, J. A. Gesiakowski, E. L. Moore. To air conditioning group engineer, A. W. Grindle, N. O. Loven.

To propulsion fluids group engineer, J. G. Hamilton, W. D. Mitchell, R. E. Morris. To installation group engineer, C. C. Harness Jr. To electrical group engineer, R. E. Malm. To mechanical group engineer, W. Nugent. To armament group engineer, W. A. Pickens. To modification group engineer, J. M. Sawicki, V. M. Siebert.

Dept. 34-2, Material Procurement: To buying supervisor, F. B. Coffer.

Dept. 271, Model 8 Field Operations: To asst. foreman, L. H. Wilson.

Service Emblems

SAN DIEGO

The following service emblems are due during the period May 1 through May 15:

Twenty-five-year: Dept. 400-1, Paul DiGiulio.

Twenty-year: Dept. 6-51, P. D. Ferrera; Dept. 403, R. A. Yeager.

Fifteen-year: Dept. 6, J. K. Chott; Dept. 8, C. L. Smith; Dept. 14, Roberta J. Grand, H W. Oslund; Dept. 15, Mildred E. McDowell; Dept. 115, M. L. Barksdale; Dept. 138, H. L. E. Shaulis; Dept. 139, J. T. Hobbs Jr.; Dept. 192, E. W. Blodgett; Dept. 197-4, C. E. Boyd (due 12-4-56); Dept. 400, C. F. Hanson; Dept. 403, D. O. Stephenson.

Ten-year: Dept. 6, Louise B. Ellis, Dorothy G. Krause; Dept. 14, Ina May S. Reed; Dept. 15, Doris B. Arnott, Harry L. Ashton; Dept. 25, J. E. Nelson, C. D. Van Mierlo; Dept. 31, J. A. Farkas, D. A. Geygan.

Dept. 69, Cletus N. Walter; Dept. 100, Dorothy G. Corrao; Dept. 146, Elena M. Cabez De Baca; Dept. 149, Frances A. Puckett; Dept. 188, W. H. Haughawout Jr.; Dept. 197, R. H. Collins; Dept. 206, A. E. Morgan; Dept. 216, Frances S. Lujan, Augustina B. Lyall; Dept. 230, Sylvia R. Trepina; Dept. 231, L. D. Taylor; Dept. 232, Aletha L. James; Dept. 233, W. D. Caffey; Dept. 403, E. E. Aldridge.

Retirements

SAN DIEGO

BAY—George A., Dept. 120. Seniority date Jan. 17, 1951, retirement effective April 30, 1959.

BROWN—Carl M., Dept. 25-2. Seniority date Dec. 12, 1950, retirement effective April 27, 1959.

COLPEAN—Roy C., Dept. 14-1. Seniority date March 21, 1952, retirement effective April 20, 1959.

EDMONSON — Charles A., Dept. 4. Seniority date Feb. 28, 1952, retirement effective April 24, 1959.

HOLLENBECK—Catherine, Dept. 192. Seniority date March 9, 1953, retirement effective May 1, 1959.

McKELVEY—Roy J., Dept. 98. Seniority date Oct. 25, 1943, retirement effective April 30, 1959.

NEWMAN — Eugene J., Dept. 400. Seniority date March 26, 1953, retirement effective May 1, 1959.

SKINNER—John G., Dept. 215. Seniority date May 24, 1956, retirement effective April 18, 1959.

WILLIS—Roscoe C., Dept. 102. Seniority date April 13, 1951, retirement effective April 24, 1959.

YOUNG—Andrew B., Dept. 14. Seniority date April 13, 1943, retirement effective April 24, 1959.

Personals

SAN DIEGO

The family of Camillo Cappellitti offers heartfelt appreciation to the many Convair friends at both Plants 1 and 2, for the expressions of sympathy, kindnesses and generosity.

Angie Cappellitti, Dept. 288 8

Lost & Found

SAN DIEGO

LOST—White gold engagement ring. baguette on either side of emerald cut diamond, in Rider-Driver parking lot adjacent to Overpass 2, Plant 1, on April 24. Reward offered for return to Joan Liggett, ext. 759, Plant 1.

Births

SAN DIEGO

WEEKLEY—Daughter, Shelagh Christine, 6 lbs., 11 oz., born April 16 to Mr. and Mrs. Alan A. Weekley, Dept. 6.

Deaths

SAN DIEGO

WARNER—George O., Dept. 231. Died April 24. Survived by wife, Ruth V. Warner, and mother, Mrs. Jessie Doane.

Outing to Salton Sea Planned In June for SD Water Skiers

The Convair Water Ski Club has selected June 6-7 for an outing to the Salton Sea, T. E. Mathews, commissioner, reported last week.

He said Mike Alianelli, ext. 423, Plant 2, has been appointed chairman of the event, and will handle reservations for all Plant 2 participants. Wayne Zook, ext. 1451, co-chairman, is handling like chores for Plant 1 skiers.

Mathews said the outing has been arranged to foster new memberships in the club and guaranteed skiers a lot of fun riding the slats on the warm inland sea.

The group plans to rendezvous at Desert Shores. Those who do not intend to camp out will have to make their own reservations, Mathews added.

Final arrangements for the event will be solidified at the regular business meeting of the club at 7:30 p.m. June 2 at the Gillespie Field Clubhouse. Business meetings are always held the first Tuesday of the month.

Skiing sessions are held by the club every Saturday and Sunday at Gleason Point, Mission Bay. Starting times may vary with weather conditions. Information on weekends can be obtained by calling Mathews at BR-7-1017.

SD Men Will Teach Life Saving Course

Two Convair SD men will be teaching a Red Cross senior life saving course at the San Diego Club pool this summer. The free series of classes which start June 12 is open to Convair employees.

Roy Poston and Gordon Jones, both of Dept. 6 and qualified Red Cross water safety instructors, will teach life-saving techniques for swimmers and non-swimmers, swimming skills and artificial respiration. Classes will be held Tuesdays and Fridays, 7-9 p.m. for six weeks. Cost is 25 cents for each class and registration will be held the first night at the pool.

Camera Club Sets Photorama Party

Camera Clubbers at Convair SD will hold a post-Photorama party at the May 25 meeting in the Photo Arts Bldg., Balboa Park.

Members are asked to bring their Photorama prints and slides. Camera Club models will be guests at the 7:30 p.m. meeting.

Entries Open For Golf Club Championships

Entries are now being taken for the Convair Golf Club's annual match play championships to be played on June 7, 14, 20-21. Registration closes May 22.

First matches will be played alternately at Torrey Pines and Flying Hills. Semifinals and finals are set for Rancho Santa Fe.

San Diego participants should contact Alma, ext. 318, Plant 2. Astro linksmen can contact Hal Purnell, ext. 1313.

Officers elected last month will be installed at the club's quarterly meeting in June, location yet to be selected. They are Hal Purnell, Dept. 1-24 (Astro), president; G. L. Dix, Dept. 292-0 (SD), first vice president; Jud Kenney, Dept. 579-5 (Astro), second vice president; H. M. Smith, Dept. 8-2 (SD), secretary; and C. W. Maxfield, Dept. 120 (SD), treasurer.

Broadway Sweeps Pistol Competition

B. L. Broadway (Dept. 603) swept both events of a Pistol Club contest held April 26 at the San Diego Police Pistol Range.

He registered scores of 289 on the .22 caliber police course and 285 over the short national match course. Expert class winner was Carl Hornburg (Dept. 166) while Dale Young (Dept. 31) took sharpshooter honors.

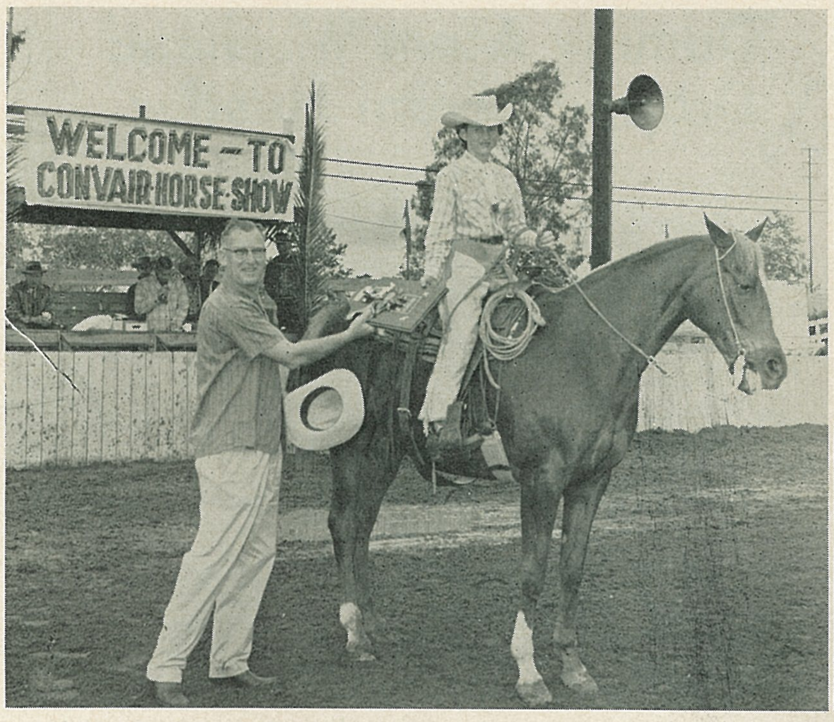
Carl Monds (Dept. 115) and Ralph Picard (Dept. 6) placed second and third respectively in the national match event.

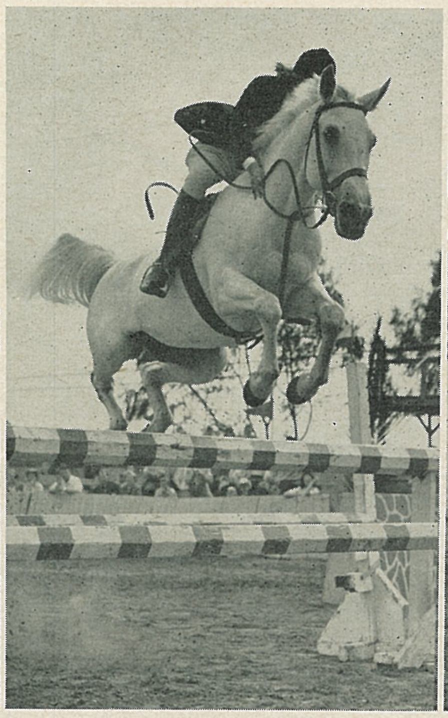
The Convair SD Pistol Club shoots the second and fourth Sunday of the month at 9 a.m. at the San Diego Police Pistol Range, corner of Home Ave. and Federal Blvd.

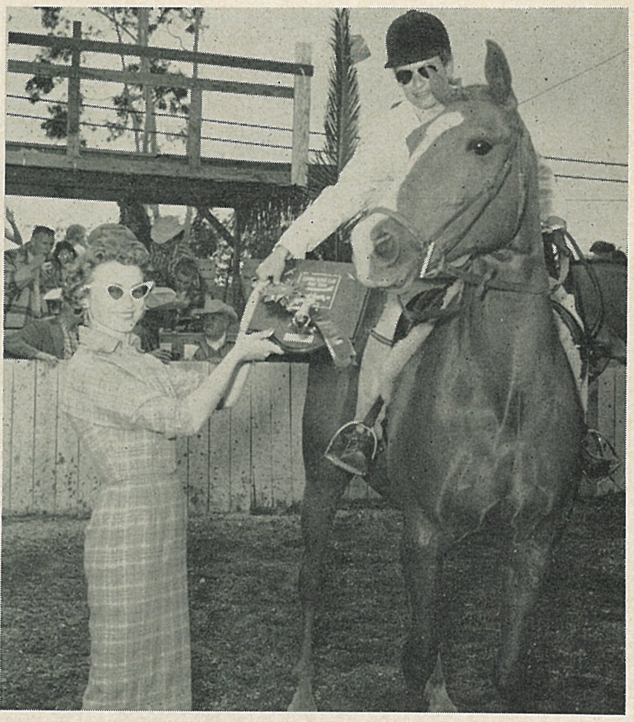




AWARD NIGHT—Jerry Wright, CRA commissioner, was busy man at Sports Car Club awards and installation of officers night last month. Below: Wright (on left) congratulates new officers, Skip Carpenter, Bob Turner, Virginia Weiner and Tom Jackson. Above: Wright hands Dick Elms plaque for winning Sportsman of Year honor. Others (from left) included Willa Isbell, Sportswoman of Year, and runners-up for awards, Carol Turner, Bob Turner and Hilda Ochodnicky. Dick Mobraaten (not shown) was also nominee for honor.







HORSE SHOW—After holding first two events in rain, sun broke through and crowds came in droves (estimated at 2,500) to make Convair SD's Horse Show one of biggest events ever staged by Riding Club. Typical award scenes included C. L. Pogorel (at far left), CRA commissioner, making presentation and Jarvis Esenwein (at far right), daughter of A. C. Esenwein, Convair executive vice president, accepting plaque.—Photos by Bill Dawson.

Ground School Class to Report

A summer schedule of ground school courses, sponsored by the CRA Solo Flyers at Convair SD, will start June 1 and 3.

Classes, held every Monday and Wednesday from 7:30-9:30 p.m. at Jim's Air Service, Lindbergh Field, will cover all information necessary for a private pilot's FAA written examination.

Tuition for all Convair SD folk is underwritten by CRA. Students may choose either of the weekly sessions. The subject matter is the same. The 18-week course is taught by Rex Robinson (Dept. 6) who holds engine and multi-engine ratings and was an instructor in the Air Force.

Subjects taught include facts of flight, navigation, radio, meteorology, use of flight manuals and airman's guide, engine and aircraft structure and care for the pilot and general review. The classes now being formed will also tour the FAA Weather Bureau and Control Tower at Lindbergh Field.

Prospective flyers may sign up at class time at Jim's Air Service or call Rex Robinson, ext. 1631, Plant 1, for information.

Bargain Golf Class Slated

Special golf lessons, open to Astro and San Diego employees and members of their families, will be repeated again this year by popular request, according to Ken Wulfemeyer, commissioner.

Slated for Mission Valley Country Club, the sessions open May 26 and May 28 and continue for a period of six weeks. Three classes each on Tuesdays and Thursdays will be scheduled. They begin at 4:30, 5:30 and 6:30 p.m.

However, only 10 students will be allowed in each class. Registration will be on a first-come, first-served basis. Total cost for the six one-hour lessons is $10. This fee must be paid upon registration.

Contact employee services offices to enroll: Astro, ext. 1111; San Diego, ext. 1705.

Instructors will include three pros at each class from Mission Valley CC's regular staff of professionals, Wulfemeyer said.

CRA Needs Umpires For Shop Softball

Softball officials interested in serving as paid umpires for shop league competition should contact Gil Crosthwaite, CRA commissioner, ext. 1245, Plant 1, before Friday (May 15).

Applicants will be tested to insure a required familiarity with rules of the game. Crosthwaite said the majority of contests will be doubleheaders with games played between 6:30-10 p.m.

CRA Sports & Recreation Convairiety

Dept. 31, Dreamers, 'Glo's' Win Plant Keg Championships

After juggling scores and weeding through tally sheets of approximately 500 entrants in the annual Convair SD plant championship tourney Commissioner Jim Hayman and his assistants have unearthed the winners.

Concluding play late last month the tourney attracted an excellent turnout that compared favorably with last year's record-breaking event which included keglers from Astro.

Due to space limitation, **Convairiety** can list only winners in each bracket. Hayman said complete standings will be in the mail May 15.

In team competition, in which 93 teams were entered, Dept. 31 (Manufacturing Control) won handicap honors with a tally of 3142 and the Dreamers won the scratch event with 2835. Honors in the mixed team event were won by Glo's Friends, who handicapped a 3049 total.

Individual honors in doubles competition went to Leo Denny and Gary Kelly with a scratch total of 1226. The handicap event was won by George Dodrv and Merle Cornish (1317).

Nell Meller and Roland Dean took the mixed doubles event with 1283. The singles scratch event went to Joe Kerna (732) while Gene Shaw (726) took handicapped honors.

In the all events bracket, Joe Kerna won the overall scratch event, hitting for 1921, and Bob Pearson handicapped a 2042 score. In the same category Ann Hawkins won honors for the gals with a tally of 1892.

ATA TRAP SHOOT SET FOR MAY 17 BY SD GUN CLUB

A registered ATA trap shoot will be staged May 17 at the Gillespie Field Gun Club site, Jack Swank, commissioner, reported.

He said the shoot is being sponsored primarily by the CRA club to give both new and experienced shooters an opportunity to record registered targets under the auspices of the Amateur Trapshooting Association.

Shooting gets under way at 10 a.m. with 100 16-yd. targets, followed by handicap targets and 25 doubles. Trophies will go to champions in all three categories.

Practice traps will be open for one hour before starting time.

In a Silver Bird shoot staged by the club last month Larry Frisbee (Dept. 3) took trap honors. Other Convair SD winners included Charles Ries (Dept. 4), who took first place in the skeet event, and Joe Williamson, winner of the rifle category.

AWARD NIGHT SET FOR SD KEGLERS

Annual bowling awards banquet for league and tournament champions will be held June 20 at 6:30 p.m. at the Admiral Kidd Club, Jim Hayman, CRA commissioner, has announced.

Although a notice will be mailed to each of the winners, Hayman asked that they contact either him, ext. 1155, Plant 1, or Mike Brooks, co-commissioner, ext. 720, Plant 2, so they can determine well in advance how many reservations to make.

Complete plant championship tournament results will be available May 15, Hayman said. Prizes will be distributed to keglers entered in summer league play. Others will be able to pick them up at employee services, Plants 1 and 2, after Monday, May 25.

Corsage Instruction At Meeting Tonight

A florist with over 40 years experience in the San Diego area, Florence Perkins, will instruct members and guests of the Convair SD Garden Club on the correct procedure of making a professional corsage.

All interested Convair SD folk are invited to attend the demonstration and meeting tonight (May 13) at 7:30 p.m. in the Floral Assoc. Bldg., Balboa Park.

If possible, guests are asked to bring small flowers. All other material will be furnished by the Garden Club. Students will make their own corsages as they follow the step-by-step instruction.

Corsages made by Mrs. Perkins will be given away as door prizes.

Officer Election Set for SD Hams

Radio club members at Convair SD were urged to exercise their vote tomorrow night (May 14) when the group holds its annual election of officers at 8 p.m. at the Harbor Drive Headquarters.

J. B. Baker, commissioner, said installation would be held May 16 at 7:30 p.m. at the Henry Langhorst Restaurant near La Mesa Airport. Reservations for the affair can be made in advance by contacting Baker, ext. 491 or 2568, Plant 1.

300 Riders in 20 Events Perform in Horse Show

Over 300 entries in 20 events, performing before 2,500 spectators, made the Convair SD Horse Show April 26 one of the most successful ever staged by the Riding Club.

C. L. Pogorel, commissioner, said threatening weather, which almost forced cancellation of the show, cleared up after the second event.

Show manager, F. C. Darnell, thanked committee members and all those who helped in putting on the show. V. G. Paul was ring master and R. L. Robertson, announcer. J. C. Dills judged the English competition and O. F. Rousseau the Western.

Two riders each won three events. Carolyn Waller rode John Henry to victories in Western Pleasure and Horsemanship classes and Planters Hall Pride to first place in the English Pleasure.

Sharon Griffith, on Millirotenger, won the Jumpers class and Hunt-Seat equitation. She also took first, riding Reno Joe-Doo, in the Hunters open category.

Sandra Fleet, Judy Stone, and Jean Immenschuh each won two events. Other winners included Fay Latson, Pamela Conant, Linda Kibbie, Charles Tyson, Jarvis Esenwein, Carol Houser, Lenore Aufdenspring, and Mrs. O. B. Davey.

Coin Club Meets Third Tuesday Now

Meetings of the Convair SD Coin Club will now be held the third Tuesday of the month—not the fourth Wednesday, Joe Miller, Coin Club spokesman, said.

They will start at 8 p.m. in the Hearing Aid Society Bldg., 3842 Herbert St. First meeting new date applies to is the May 19 session.

Special meetings of the club for night-shift employees are now being held the second Sunday of the month at the CRA Clubhouse on Pacific Hwy. They start at 7:30 p.m.

Convair Night Set For Old Globe Play

CRA reduced-price tickets will go on sale tomorrow (May 14) at 9 a.m. at Convair SD employee services, Plant 1 and 2, to the Old Globe theater production, "The Man Who Came to Dinner."

Convair night will be June 7 and seats will be sold on a two-for-one basis at $1.75 and $2.25.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY—Trip planned to CB and FAA tourney May 23 and 24 at Wonder Valley Dude Ranch near Fresno, Calif. Contact Al Phipps, CY-5-8194, for information.

ASTRONOMY—Talk on radio astronomy by Dr. W. C. Erickson at May 15 meeting, 7:30 p.m., CRA Clubhouse, Gillespie Field.

BOWLING — Award banquet June 20, 6:30 p.m., Admiral Kidd Officer's Club.

BRIDGE CLUB—Session May 19, 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CAMERA CLUB—Post-Photorama party May 25, 7:30 p.m., Photo Arts Bldg., Balboa Park.

COIN CLUB — Meeting May 19, 8 p.m., Hearing Aid Society Bldg., 3842 Herbert St.

GARDEN CLUB — Corsage-making demonstration at meeting tonight (May 13), 7:30 p.m., Floral Association Bldg., Balboa Park.

GOLF—Entries now open for Golf Club championships June 7, 14, 21-22. Registration open for golf lessons to be held at Mission Valley Country Club. Call ext. 1705 to register.

GUN CLUB—Registered ATA trap shoot May 17, 10 a.m., Gillespie Field, El Cajon.

JUDO—Instruction every Wednesday and Thursday, 7-8:30 p.m., Federal Bldg., Balboa Park.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. May 19—"The Great Caruso" and "Seven Hills of Rome." May 26—"I Want to Live" and "Separate Tables." Admission: adults, 25c; children, 10c.

RADIO CLUB—Election of officers at meeting tomorrow night (May 14), 8 p.m., Harbor Drive Headquarters. Installation May 16, 7:30 p.m., Henry Langhorst Restaurant near La Mesa Airport.

RIDING CLUB—Meeting May 20, 7:15 p.m., Gillespie Field Clubhouse.

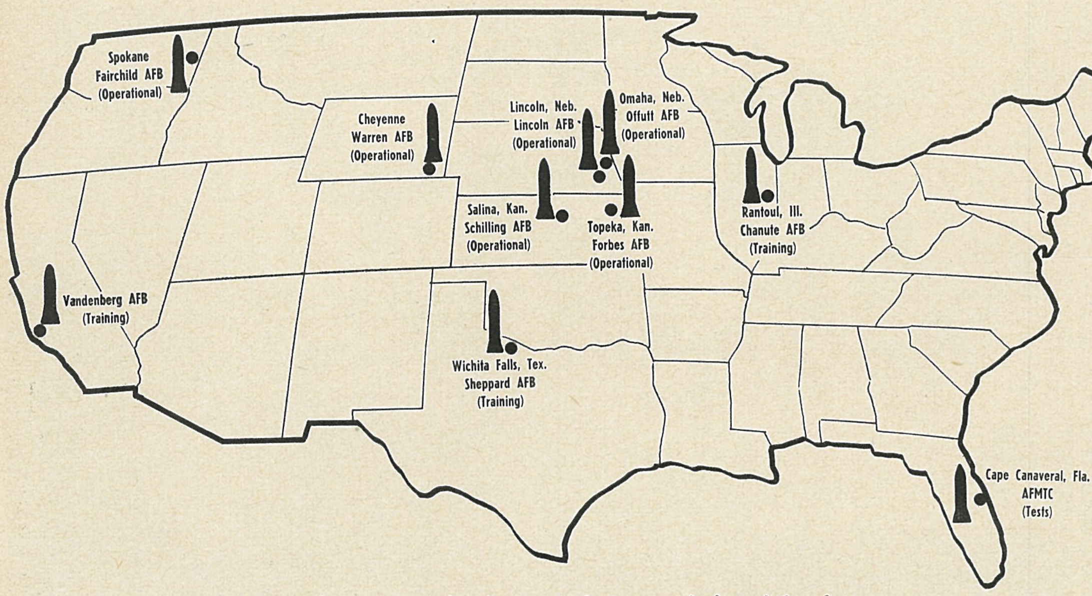
ROLLER SKATING—Monthly skate night Monday (May 18) at Skateland, Front and G Sts., 6:30-9 p.m. Free tickets at employee services, both plants, and from departmental representatives.

SOLO FLYERS—New ground school course starts June 1 and 3 at Jim's Air Service, Lindbergh Field.

SQUARE DANCING — Party night, May 23, 6:30 p.m. potluck dinner, University Heights Community Center, 4044 Idaho St.

WATER SKI CLUB — Trip planned June 6-7 to Salton Sea. Meeting June 2, 7:30 p.m., Gillespie Field CRA Clubhouse.

WOMEN'S ACTIVITIES — Charm extension course starts tonight (May 13), 7-9 p.m., House of Hospitality, Balboa Park.



Noted here are Atlas bases in being and slated for future.

Teams Will Leap Frog Each Other In Activation of New Atlas Bases

In the months ahead, Astronautics "off-site bases," already a considerable number, will multiply even more.

The multiplication will coincide with activation of missile launching facilities for the Atlas ICBM at Air Force bases. Astro personnel will be stationed at each one until the base is completely operational.

Locations of the bases are sprinkled across the continent in eight different states.

Convair's responsibility is to establish criteria for Atlas complexes; integrate installation and check out ground support equipment at the sites; and turn them over to the Air Force in operational condition.

"This is similar to Convair divisions which produce aircraft, test them, then turn them over to the Air Force—combat ready," C. F. McCabe, base activation manager for Astro's product support department, explained.

Activation of the bases is staggered over many months. As a result, Astro personnel will be "leap frogging" from one to another. The complement at a base will be roughly half engineers and technicians and half supporting forces (material handlers, office workers, truck drivers). Total employment at any one base will rise and fall, keyed to the degree of activity.

Declining personnel requirements at one base are expected to coincide with mounting demand at another.

Between 40 and 60 per cent of personnel at any one base will be Astronautics people who have been transferred either from an activated base or from some other Astro facility. The balance, whenever possible, will be hired locally. This system, worked out on a careful schedule by the Air Force and Astro, will give maximum utilization of a pool of skilled personnel available.

Early phases of the overall program already are in operation. More than 100 now working at Vandenberg AFB in California are scheduled for duty at Warren AFB, Wyo. This is to be the first fully operational base. A token force is now on duty at Cheyenne, site of Warren.

* * *

Talk to enough of the almost 1,000 Astronautics employees now at Vandenberg AFB in California and you'll come up with a few from just about any Convair facility you can name.

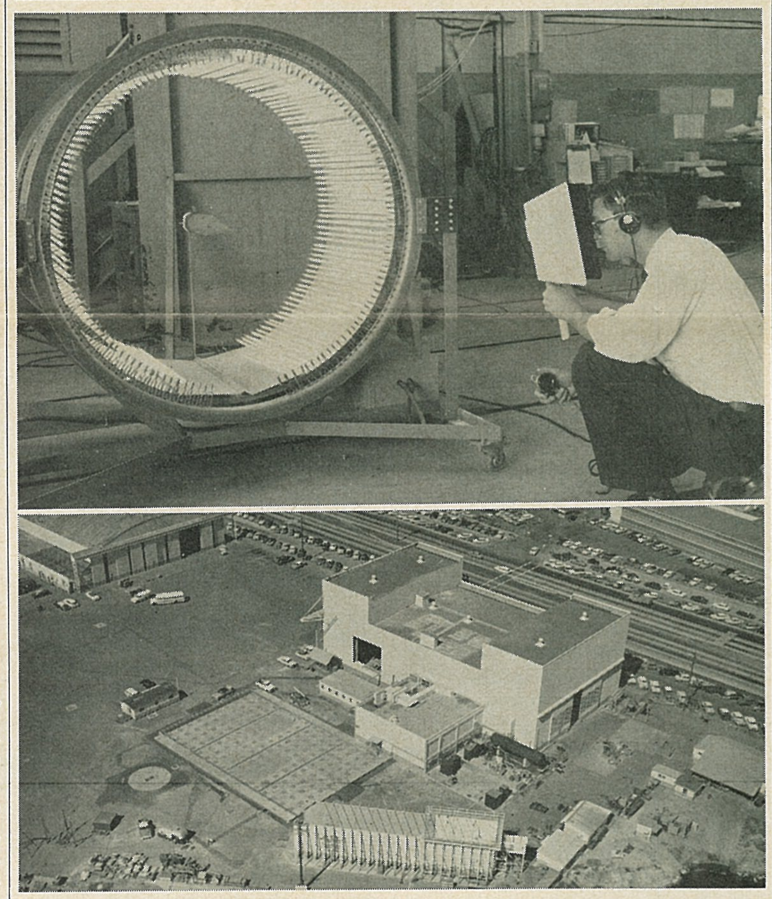
This has earned the base an unofficial title of Astro's "melting pot."

Bulk of the Astro population at Vandenberg is assigned to "test base operations," considered the resident work force. In addition, however, there are temporary work forces which include members of Astro's main maintenance teams, base activation personnel who will move to future Atlas ICBM-equipped bases as they are readied, instructors taking part in Astro and Air Force training programs, etc.

An example of the "melting pot" is found in the personnel assigned to C. C. Woodard and G. F. MacLean, assistant foremen in the squadron maintenance area. Woodard himself transferred from San Diego Division's flight test operation at Edwards AFB. MacLean was one of the first four hourly employees sent to Vandenberg from the Astro plant. He was subsequently promoted to supervision. Under them are 10 men from MSTS, Edwards AFB; four from SD's Edwards AFB facility and eight from the Palmdale operation; eight from Astro's main plant; six from AFMTC in Florida and five hired locally.

Typical of the transfers is William Elkins, a missile checkout mechanic now and a former leadman engine mechanic at Edwards AFB where he worked on F-106s. Elkins worked for Convair in Tucson during World War II, left, but returned in 1954.

"I had little trouble making the transition from jets to missiles," he remarked last week. "It all boils down to knowing your product."



NEW FACILITIES—Lower shot shows aerial of $2 million high temperature structures research laboratories to be dedicated tomorrow (May 14) at seaplane ramp. Inter-division facilities include enclosed test building (center), adjoining central control and office building, outside slab for testing, and hydrostatic test tank in foreground. Upper shot shows 500,000-watt infrared oven for testing of aircraft and missile parts in operation. J. P. Moran, structures test lab engineer, protects face from glowing filaments with glare shield.

Dummy Atom Warhead Dropped From Hustler

The first B-58 disposable pod equipped with a dummy nuclear warhead has been test-dropped at Holloman AFB range in New Mexico.

The special warhead is a product of the Sandia Corp., and although it wasn't "alive," it simulated the weight and instrumentation of an actual nuclear article.

The pod was shipped by trailer truck to the test base where Convair and Sandia people installed it and checked out instrumentation.

Team captain on the plane making the drop was Steve Andress. J. A. Graham is team captain for the actual pod drops.

Andress says that the plane that dropped the warhead has seven scheduled drops before the end of the program.

Being photographed from all angles, the warhead drop on the Holloman AFB range was recorded by cameras on the Hustler, on the chase plane and on the ground.

More than 20 pods have been dropped at Holloman, a number of them at Mach 2 speeds. Purpose of the tests is to demonstrate effectiveness of the B-58 and the disposable pods, and to gather ballistic data on the fall of the pod in order that Air Force pilots will be able to drop it in a "pickle barrel."

Following the drops, the Hustlers frequently land at nearby Kirtland Air Force Base.

Convair people at Kirtland monitor all of the B-58 and chase aircraft landing there with a mobile radio installed in a station wagon.

"By use of the mobile radio, our pilots can tell us when they're going to land at Kirtland," commented Joe Freeman, Convair industrial relations representative at that base. "Of course, they're also in contact with Kirtland base operations."

Those operating the mobile radio include Freeman, W. T. Abbott, test base manager, Dept. 12 personnel and flight test engineers.

There are eight permanent Convair people at Kirtland, but during the pod drops 35 to 50 are sent out from the Fort Worth Division.

Wanfried Assigned To Missiles Center

Maj. Harold W. Wanfried, Air Force officer who recently completed a year's tour of duty at Convair SD, has been reassigned to the Air Materiel Command's Ballistic Missiles Center at Inglewood, Calif.

The Ballistic Missiles Center, under command of Maj. Gen. Ben I. Funk, is responsible for procurement, production, and logistic support of the Atlas, together with other missile weapon systems, satellite systems, and space probe vehicles.

Major Wanfried and Maj. Gordon Palmer were at Convair SD from March of last year until March, 1959, under the Air Force "Training with Industry" program. They also spent several weeks at Convair Astronautics during their time here.

SD MAN HONORED

Ed Warns (Convair SD, Dept. 6) received a certificate of honor at the annual Freedom Foundations Awards dinner in San Diego May 4 for an editorial he had written that urged "Right to Vote Vital to Free Government."



GROUND TO AIR—Joe Freeman, Convair Fort Worth industrial relations representative at Kirtland AFB, keeps in touch with B-58 planning to land at that base after warhead pod drop at Holloman AFB range.

Thunder of Rocket Engines at SD Only Sweet Music to Loving Pair

In addition to being "blind," love must also be "deaf."

Two doting "parents," expecting offspring in only six days, have built their love-nest smack in the middle of the rocket test facility at Convair SD's seaplane ramp.

Amid racket and roar and directly under the warning horn amplifier, two doves have selected a choice location on a steel girder for their nest.

The doves have patiently been taking turns sitting on the two small white eggs, unconcerned with the furor going on around their home.

(The due date for the fledglings is figured from the first day the eggs appeared in the nest and a 21-day lapse until the actual hatching. This on the authority of Bill Grant (Dept. 31) who in addition to working on the rocket tests is also a raiser of doves and quail.)

High Temperature Inter-Division Research Lab Can Duplicate Heat and Loads of Space Travel

Formal dedication of Convair's high temperature structures research laboratories located at the seaplane ramp at Convair SD will be held tomorrow (May 14) before a group of about 100 General Dynamics Corporation, Convair officials and civic leaders, announced R. C. Sebold, Convair vice president-engineering.

Following the welcome by SD Division Manager B. F. Coggan, R. E. Bayless, Convair director of engineering, will outline the value of the new $2 million inter-division facility, the needs it fills, and its future.

The group will be conducted through the new 7,200-sq. ft. two-story concrete control building, the 100x200-ft. enclosed testing facility, outside test area, and nearby hydrostatic test tank.

Called one of the finest research laboratories in the country, the facility makes possible the static testing of specimens from nuts and bolts to an entire 300,000-lb. aircraft or missile at ambient temperatures. The facility also can duplicate temperatures from minus 300 degrees F. to 15,000 degrees F. and loads encountered in high speed flight of aircraft, missiles, and space vehicles. Thus, the laboratory facilities enable engineers to check designs before first flights.

The enclosed facility, with area equivalent to a six-story-high building is equipped for applying heavy structural loads from walls, floor (a 3-ft. thick slab) and roof trusses.

The outside area is a 4-ft.-thick concrete slab, 130x90 feet in overall dimensions, which will be enclosed later.

The control building houses electronically-controlled equipment to feed heat and loads at predetermined rates, allowing tests to be conducted by remote control.

A giant "brain," nicknamed DAISY (Data Acquisition and Interpretation System), is ready to go into operation, collecting information from hundreds of pickups on test specimens at a rate of 1600 readings a second.

The system, designed by Convair's computer laboratory, is transistorized to save space and reduce maintenance. Over 80 miles of wire are contained in the basic installation. Temperature, pressure, deflection, and strain readings are fed by eight cables to Convair SD's electronic computers in Plant 1 for processing, then transmitted back to the laboratory for recording on tape and automatic plotting on charts.

As much as six million watts of electricity are available for heating—enough power to serve a residential area of 12,000—and an 80,000-lb. tank of liquid carbon dioxide provides means to cool specimens and maintains a safety "blanket" of gas during tests involving fuel.

The new facilities, which are available to all divisions of Convair on an equal basis, are under the direction of E. F. Strong, chief of structures and material laboratories, with W. E. Wise, group engineer, in charge of operations, assisted by A. R. Vollmecke and Ed Schiff.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

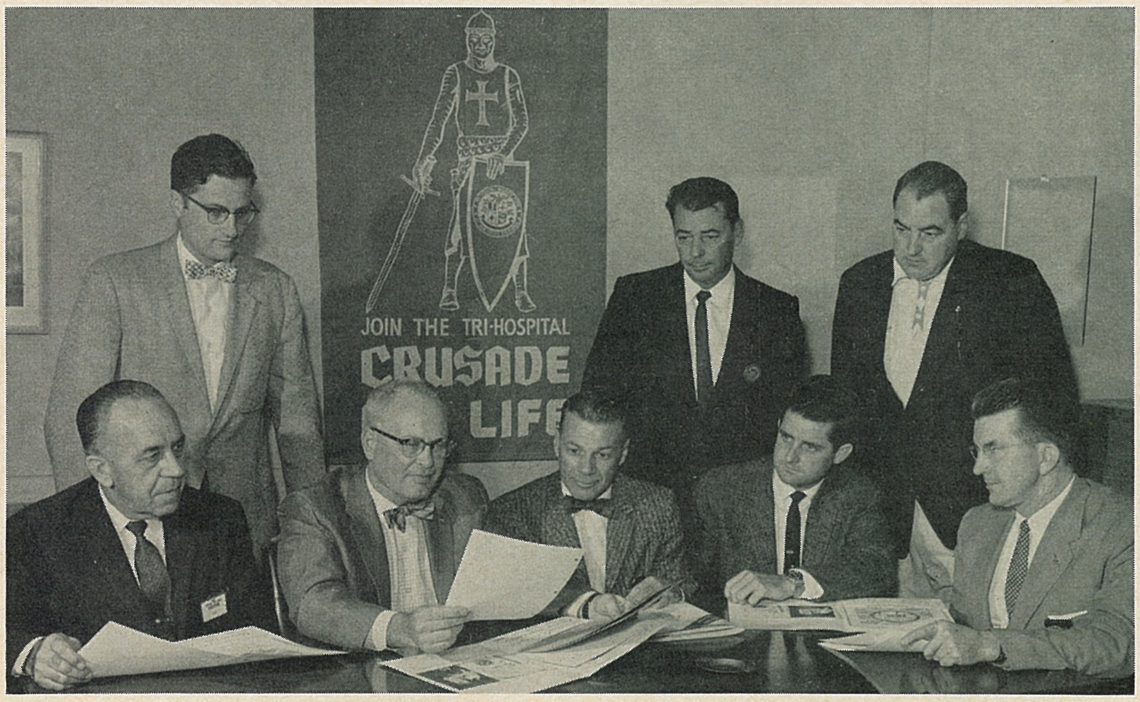
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San Diego EDITION

(Serving San Diego Division of Convair)

SD Division news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



BRIEFING—Mapping plans for Tri-Hospital campaign at Convair SD are committee members (sitting, left to right): H. S. Williams; J. K. Field, campaign chairman; Vince Cernuto; Dave Chambers; and R. R. Hoover. Standing (from left): Ralph Molloy, Paul Osborn and John F. McIntyre.

Hospital Fund Drive Begins Next Monday

San Diego Division will kick off its in-plant Tri-Hospital Fund Drive next Monday morning.

The campaign, in which each individual is being asked to give one day's pay a year for three years, by payroll deduction, will continue through Friday, June 12. During that period, every single employee at Plants 1 and 2 will be individually approached by campaign workers and asked to authorize the deduction.

Tab cards will carry the amount of deduction per pay period. All that will be necessary to put the pledge into effect will be a signature.

Last week the Convair Hospital Fund Committee held its first meeting and mapped general plans. Chairman is J. K. Field, employee services chief. Members include Paul Osborn, Plant 1 factory manager; R. R. Hoover, assistant chief engineer-administration; Vince Cernuto, Plant 2 manufacturing control chief; Howard S. Williams, representing the IBEW; David Chambers and John McIntyre, representing the IAM; and Ralph Molloy, representing the EAA.

"Our goal is simply one day's pay a year for three years from everyone," Field said. "If we achieve this, we will have pledged more than $1 million. Our success at SD Division, and success of the campaign which is being conducted at Astronautics Division, well may decide the issue for the city-wide campaign."

Campaign instruction sheets, brochures and fact sheets are being distributed to campaign workers throughout the plants who will do the actual contact work. They will be prepared to answer any questions.

Separate organizations will be set up within Plants 1, 2 and engineering to operate in close cooperation with union representatives.

(Continued on Page 2)

Lee Shipstead SD Management Club President

Sixteen votes spelled the difference in a close race for the presidency of the Convair SD Management Club. S. L. "Lee" Shipstead (Dept. 192-1) tallied 713 votes to assume the club's top office for 1959-60.

Edged out was L. G. "Larry" Lawson (Dept. 188-1). Shipstead, as the new president, succeeds Ed Caldwell. For Shipstead, a manufacturing control general supervisor, it marked an almost exact reversal of last year's campaign when he had been narrowly defeated by Caldwell in the presidential race.

Bob Elo, chairman of the nominating committee, raised Shipstead's hand high over his head in the traditional winner's gesture before a capacity crowd assembled at El Cortez Hotel May 13.

Other new office-holders, who will be installed at the club's June 17 meeting, were also announced.

Assuming the duties of the first vice president will be T. H. Chadwick (Dept. 6). C. F. McMenamy (Dept. 6) will be installed as second vice president. Duties of the recording secretary will be performed by B. J. Wood (Dept. 93-0). The new treasurer is R. W. Dill (Dept. 5) and D. K. Kerr (Dept. 91-0) will take over as financial secretary.

(Continued on Page 2)

Cost Reduction Vital for SD, Says Esenwein

Cost reduction is the key to Convair San Diego's continued growth and success, August C. Esenwein, Convair executive vice president, warned last week in his first appearance before the SD Management Club.

"A tough job lies ahead," he said. "To stay great we must be leaders in setting the pace for more economical operations."

Calling for a return to the "almost lost concepts of thrift and frugality," Esenwein declared that the necessity for cost reduction exists on a national scale as well as lower levels down to the family.

"The cost of our defense posture has increased alarmingly. Space is another bill we will have to pay. If the high cost trend continues we could lose the cold war."

Because of the tremendous costs, programs are becoming fewer in number and this means ever stiffer competition and ultimately fewer companies in business, he declared.

Of every dollar received in sales 65 cents goes outside the plants, chiefly to vendors. Of the remaining 35 cents, 31½ cents is paid out in wages and salaries. He advocated improved procurement practices with a painstaking selection of vendors and more follow-up work, furnishing management aids to companies that need them and shrewder negotiations over the bargaining tables.

"All departments and functions have a part in cost reduction, but it must start with engineering," he said. "The question must always be asked: Can we design and build better and less expensively?"

Response to the current RX program has been "gratifying," he said.

"Our people have a real will to become more effective and effi-

(Continued on Page 2)

SD Division Scores 51 Days Injury Free

A finger injury May 6 ended for San Diego Division a 51-day period of freedom from disabling injury that involved 7½ million manhours. This was the longest period of no disabling accidents since the division set an industry record in 1956 of 105 days and 21 million manhours.

1958 President's Award Goes to Kent Sinclair

Kent Sinclair, a supervisor in receiving inspection at Convair SD, May 13 received the 1958 President's Award, symbolic honor paid annually for cost reduction activities.

Convair President J. V. Naish made the presentation during the "Educational Night" meeting of the Convair SD Management Club at El Cortez Hotel.

Previous to the presentation, B. F. Coggan, San Diego Division manager, introduced 19 of the 21 men in the running for the award. The combined savings to Convair through their efforts totaled $1,335,957.

In his presentation, Naish reviewed briefly some of the reasons that make cost reduction necessary. He said the selection of Sinclair was not one of chance. "His whole life has been characterized by a strong belief in extra curricular activities." (Sinclair for many months studied law at night and also authored technical papers for publication.)

Sinclair received an engraved plaque and purchase certificate.

He is the fifth person to receive the President's Award at Convair SD.

Also on the program was the presentation of the May Mug of the Month and April MacSave-it award. S. J. Barinka (Dept. 100) presented the Mug to Jim Good (Dept. 135). C. E. Boyd (Dept. 197) received the MacSave-it award for a CIP that has saved the company $44,340.

Management Club scholarship awards were also passed out at the meeting. The winners were Melanie Rohr and Fred Hunemuller (**Convairiety**, April 29).

The meeting was sponsored by the controller's department under chairmanship of D. C. Burrows.



CONGRATULATIONS — Convair SD's Kent Sinclair accepts congratulations from Convair President J. V. Naish as he wins 1958 President's Award for outstanding cost reduction efforts.

Gibbons Leaves Material Post; New Buying Positions Created

With regret, B. F. Coggan, SD Division manager, last week announced the resignation of B. P. Gibbons, manager of material, who has been with Convair since 1951 in a number of important posts.

Coggan appointed T. J. Sullivan, assistant division manager-contracts, customer service and material, as acting successor.

Formerly with Douglas and North American, Gibbons came to Convair in 1951 and later was named chief of manufacturing control for Plant 1. He took over the material managership in 1953.

Sullivan later announced the creation of a new post in material, that of general purchasing agent-subsystems and the appointment of W. G. Evans to the post and R. L. Donoghue to the position of general purchasing agent-raw materials, purchased parts, facilities and supplies. Other appointments included P. W. Bethea as material project coordinator-jet transport program; P. H. O'Dell as material project coordinator-F-106 and GSE; M. F. Moseley as chief of material estimating, material forecasting, cost administration.

Flow of Good RX Ideas Continues at High Rate

Cost analyist this week continued to wrestle with the problem of determining the first "RX" idea winners.

So many excellent recommendations were in the first blizzard of RXs that researchers were hard put to reach a decision. Chief difficulty was that many involve complicated changes in procedure that require considerable study in order to reach a fair evaluation.

Meanwhile flow of RX ideas sent to Division Manager B. F. Coggan is continuing at a substantial rate as the cost reduction campaign nears the end of its second month.

Considerable research and penetrating thought have marked many of the more recent ones, Coggan indicated.

Coggan reminded that there are still two more months to go in the RX drive in which awards of $1500 (one $1,000 and one $500) will be given for the best ideas submitted on reducing costs. These will be climaxed by a $2,000 Grand Award at the close of the campaign.

To send in an RX idea, merely write it out (preferably on an ES or CIP form), designate it "RX" and mail to Coggan at Bldg. 1, Plant 1. DO NOT PLACE IN SUGGESTION BOXES. USE THE PLANT MAIL.

Be sure and include your full name, clock number, department number, plant, building and home address.

'RX'

April $1,500...GOING

May $1,500...GOING

And still to come:

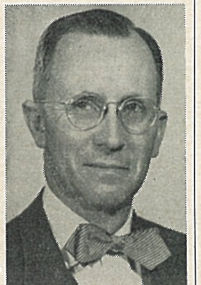
June $1,500... and

July $1,500... and

Grand Award $2,000

Conrad Kunze Appointed Assistant to Esenwein

Conrad Kunze, formerly manager of industrial engineering at Convair FW, has been appointed assistant to the executive vice president of Convair Division of General Dynamics Corporation.


Conrad Kunze

As assistant to Executive Vice President A. C. Esenwein, General Dynamics Corporation. Kunze will coordinate engineering and production methods in Convair's four operating divisions, to achieve economical design and manufacturing of Convair aircraft and weapon systems.

The appointment is effective June 1.

Kunze will be succeeded as manager of industrial engineering at Fort Worth by Wilbur E. Emish, formerly chief organization and systems engineer.

Kunze first joined Convair in March, 1956, as assistant chief tool engineer for the Fort Worth plant. Prior to that he had been superintendent of production and manager of material at Northrop Aircraft Corp. for five years. Kunze was born in Bishop, Calif., April 10, 1910, and attended Stanford University at Palo Alto. He is married and has five children.

Emish, a Convair FW veteran who went into industrial engineering in May of 1944, earned his B.A. degree at Ohio University, Athens, then went on to qualify for a master's degree in business administration in Harvard Graduate School.

Continuing Reduction in Costs Vital for SD, Says Esenwein

(Continued from Page 1)

cient. The will is there—management must tap it. The job must be done with INCREASING productivity, not just constant productivity."

One of the reasons for skyrocketing costs has been the increasing complexity of the weapon systems and the greater amount of time to develop them.

"It took 2,000 engineers working five years to develop the B-58," he added.

"Decision-making is also much more difficult. The Defense Department must always decide which weapon to choose—A or B. The question of inter-service rivalry has much in common with competition, the foundation on which the free enterprise system is laid. An attitude such as this is certainly better than one of complacency."

Esenwein pointed out another reason for the increase in costs. "It is the very size of the enterprises that must be called into being," he said. "It makes communication very difficult."

Esenwein also reviewed statistically the phenomenal cost increase necessary to establish and maintain our national defense. He pointed out that the amount necessary for defense has increased much more rapidly than our gross national product.

"Again, on the industrial level, it is necessary to have top engineering competence," Esenwein said. "But it is not enough to have it on paper. It must be an economic reality. If not, we join the ranks of the bankrupt and decimated organizations.

"Conceptual engineering is not enough," Esenwein emphasized. "We must have top performance. We will not win weapon system contracts unless we prove we are capable of being entrusted with these mammoth undertakings."

Few Tickets Left For Old Globe Play

A limited supply of CRA reduced-price tickets to the next Old Globe Theater play are still on hand at SD employee services, both plants.

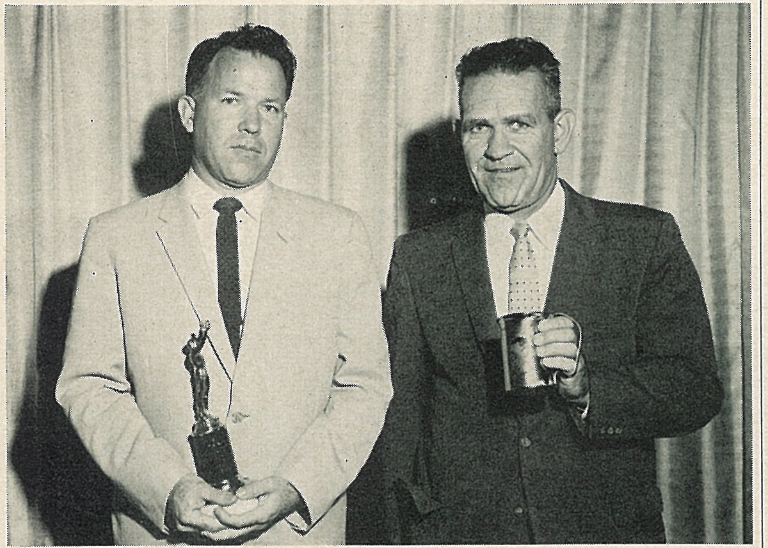
Convair night is June 7 to "The Man Who Came to Dinner," with seats available at two-for-one prices, $2.25 and $1.75.

SD SALVAGE YARD CLOSES SATURDAY

Salvage yard at Convair SD will be closed this coming Saturday (May 30) because of the Memorial Day holiday. Usual Saturday hours from 8 a.m. to 1 p.m. for convenience of Convair people will be resumed the following week (June 6).

BALL GAME TICKETS AVAILABLE ON JUNE 1

Discount tickets to the Padres home game next Wednesday (June 3) may be picked up at Convair SD employee services starting June 1.



MAC AND MUG—C. E. Boyd, Dept. 197 (left), received Mac-Save-it award for April and Jim Good (Dept. 135) was winner of May Mug of Month. Awards were made at May 13 Management Club meeting in El Cortez.

★ Convairiety ★

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Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Hospital Fund Drive Begins

(Continued from Page 1)

Citywide efforts are aimed at raising $10½ million for much-needed expansions at Mercy, Sharp and Scripps hospitals to provide rooms for several hundred more beds.

"San Diego County is well-balanced in the ratio of doctors to the population," Dr. Joseph W. Telford, president of the San Diego County Medical Society, declared last week. "It is one for every 1,000 persons. But the county is far out of balance when it comes to hospital beds. In the U.S. the average is 7½ beds per 1,000 population; in San Francisco it is 4 beds; in Los Angeles, 3 beds; while in San Diego the figure is only .7—less than one bed per 1,000 available in voluntary, non-profit hospitals."

Not only is there a critical need for hospital beds—and that means buildings and rooms to house them—but also a growing requirement for other hospital facilities such as surgeries, laboratories, special treatment equipment and technical equipment to assist in diagnosis, Dr. Telford added.

"Our hospitals are doing a remarkable job of taking care of patients despite the handicap," he continued. "But should there be a disaster or major epidemic, the hospitals simply would be unable to cope with it.

"While we are seeking support for only three hospitals in the San Diego area, it is significant that these three accounted for 83.9 per cent of all the babies born in the county last year . . ."

Students Given Convair Help

Seventeen outstanding students have been selected to receive Convair scholarship awards for the fall semester at San Diego State College.

Five will be awarded scholarships by Astronautics, 12 will receive similar awards from San Diego Division. Each will receive $75 per semester during undergraduate study as long as he or she does superior college work and meets standards set by State and Convair.

Awards were made on the basis of aptitude, scholastic record and need.

Twenty-two students are presently receiving similar Convair awards and 16 of these will be eligible for continuation of these awards this fall.

Convair San Diego will present scholarships for the first time this fall to: Kenneth F. Mansfield and Laurel E. Rainwater in business management; David Lee Browning, Dirk H. de Does, Richard Kitter and Verl Lobb in engineering; Ralph G. Jones in mathematics; James L. Lisec in personnel management; James J. Harris, William P. Mann, Robert G. Montgomery, and Joseph B. Ross in physics.

Astronautics awards go to: James L. Crock, accounting; Frank B. Nemser Jr., business management; Larry C. Brown, chemistry; Joyce Kathleen Cootz, mathematics; and Jean C. Collier, personnel management.

ENGAGEMENT ANNOUNCED

Announcement was made last week of the coming marriage of Keeva Clark, Dept. 292 at SD, to Sam Tocco of San Diego June 13. They will be wed in the church of Our Lady of the Rosary.

Second Shift Gives Blood Tomorrow

Second-shift people at Convair SD Plant 1 will donate blood tomorrow (May 28) when the Red Cross Bloodmobile is stationed in Bldg. 4, Col. D-36, between the hours of 5 and 9 p.m.

At least 150 pints are needed to get Convair SD blood credit out of the red and take care of the demand for another month.



WINNER—Bob Elo lifts arm of Lee Shipstead as he proclaims him winner in close balloting for presidency of Convair SD Management Club.

Shipstead Elected By Management Club

(Continued from Page 1)

Four members will be seated for one-year terms on the club's Board of Control. They are J. R. Chapin (Dept. 271), W. J. Wood (Dept. 6-51), C. W. Pharis (Dept. 31) and W. M. Holland (Dept. 216).

Elected for two-year terms on the board are N. R. Keough (Dept. 31) and W. R. Kemper (Dept. 292-1). C. W. Shoupe (Dept. 406) will be seated for a three-year term on the board.

Skating Derby Ducats At Employee Services

Discount tickets to the Skating Derby which opens tomorrow night (May 28), 8:30 p.m., at the San Diego Arena are available to Convair San Diego people at employee services, both plants.

The tickets are good for two separate discounts—a dollar discount on all reserved or trackside seats, good for any time; and a limited number good only for tomorrow night's opening game.



"Just a second, Dear! Let me get it in before you take it out."

4,000 Visitors Tour B-36 Park

An estimated 4,000 visitors toured B-36 Park and the enshrined Air Force B-36 intercontinental bomber at dedication ceremonies held May 17 at Amon Carter Field, Fort Worth, Texas.

Visitors for first time were able to climb inside both the forward and aft compartments of the Convair Fort Worth-built plane. They climbed up on steel stairways leading into each compartment. Inside they found the volunteer Convair employees and Convair Fort Worth Management Club members had polished everything to a sheen. Neat labels identified many pieces of equipment. The plane is virtually as complete as it was when it was flown from El Paso to land at Carter Field.

The bomb bay doors were open to give visitors a view of the 80-foot cavern in which a B-36 could carry a devastating load.

A steady stream of visitors—many of them Convair employees showing their families the inside of the plane for the first time—flowed through the interior from the opening at 2 p.m. until closing at 6 p.m.

Representing Convair at the brief dedication ceremony was Frank W. Davis, division manager, and other members of management. The Management Club was represented by Lloyd Gant, president; S. E. Keith Jr., chairman of the committee which helped arrange the memorial; Lou Lyte, B. R. Main and others.

The park will be open and guides provided by the Management Club from 2 to 6 p.m. each Saturday and Sunday.



NEW FLEET—Left to right, Ann Strazz, Frances Rance, Ada Grace, and Sylvia Wisniewski, Convair SD chauffeurs, line up beside glistening new fleet of Ford sedans and station wagons at out-plant transportation center, Plant 1.

Novel Miniatures Constructed at SD To Help in 880 Customer Training

When customer service training classes start at Convair SD this summer, "students" will be briefed on operation of the 880 jet transport in the classroom with the help of some realistic miniature 880 parts.

Such important assemblies of the Convair jet airliner as the General Electric engine have been duplicated in outward appearance in Convair SD's training aid section of service publications. The quarter-scale plywood and cardboard mockup will be used primarily to demonstrate the step-by-step sequence for disconnecting and replacing the 800 engine in the pod.

As the training progresses, the same engine replica will be used over and over to demonstrate other points pertaining to the power plant, such as fuel quantity pre-set gauges for refueling, access doors, fire extinguishing containers, etc., Don Maxion, in charge of customer maintenance training, explained.

A quarter-scale entrance door complete with internal mechanism to make it operable is another training device just finished by the "builders" in the SD training aid shop. The wooden replica is covered with plexiglas to make visible the lock action and show how the door works on a slide-lock principle, moving straight up on a glide track, then swinging on an articulated hinge to a 180-degree angle. Jerry Blumenthal and Bill Polakowski (Dept. 15-6) did the actual construction under direction of Karl Busch.

"The same planning holds true for the 880 mockup door as for the engine," continued Maxion. "Besides its basic use for familiarization of airline representatives, the device will be used to train mechanics and since the 880 door application is unique, it will be a valuable aid in presentations to line service personnel, stewardess instructors as well as potential customers."

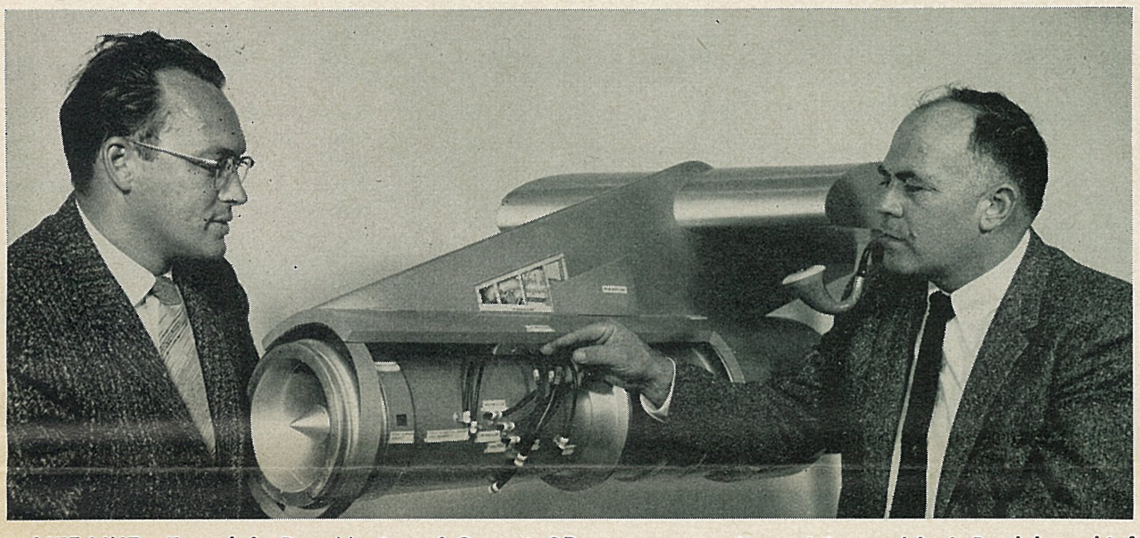
Among other visual aids to be constructed will be animated plexiglas transparencies of nose-wheel steering, nosewheel hydraulic system, refueling valve, and a full-scale cardboard mockup of an 880 cockpit with diagrams showing position of instruments and switches.

"Configurators," based on an idea conceived by Bob Detwiler, field service representative, have been developed for instruction in several of the 880's systems. Operating on a calculator principle, they show component positions during various operating conditions. A configurator will be used by each student, with a large model for instructor demonstration.

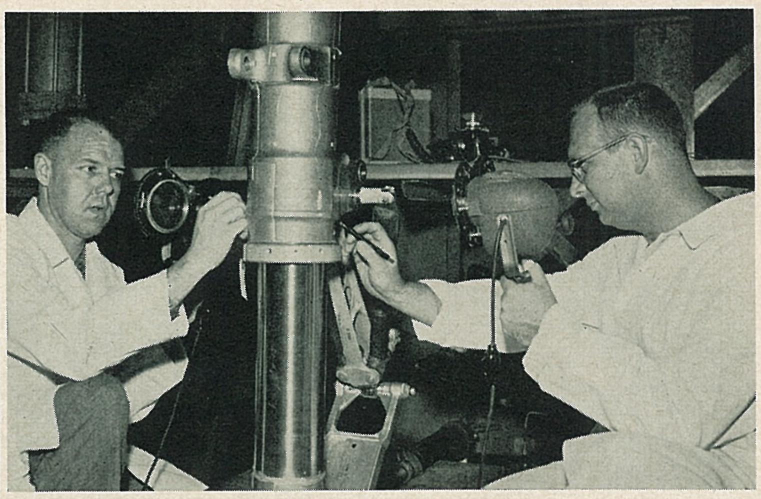
A double-size flight engineer's panel also will be used as a classroom aid. It is 7-ft. high by 4½-ft. wide, made from actual photographs of the instrument panel and will be used for student reference.

Plans for the training aids are drawn to customer service requirements by George Bain and Bruce Adams of the illustrations group of service publications and worked out in plywood and cardboard to look like the real thing.

"We must make maximum use of our time with the customer," said L. J. Bordelon, chief of transport service. "Replicas of 880 components from Convair's training aid section, engineering test, specimens, and actual airplane hardware will be used to facilitate the training, making it simpler to indoctrinate airline representatives in 880 operation as they will be able to go through the actual motions."



LIFE-LIKE—From left, Don Maxion of Convair SD customer service training and L. J. Bordelon, chief of transport service, examine quarter-scale plywood and cardboard mockup of 880 engine to be used as aid in customer training classes.



COLOR TESTS—Convair Fort Worth's Carl E. Rucker, left, Dept. 6-7, and Terry Borchardt, Menasco research analyst, check stress on B-58 landing gear by photostress method. Field meter enables them to measure stress by means of colors they see.

Unique Color Process Helps Measure Stress

Convair Fort Worth is engaging in "technicolor" with a special polaroid application which gives engineers a new way to measure stress in aircraft parts and components.

Called photostress testing, the new process developed by Tatnall Measuring Systems Co. uses known principles of polarized light to measure stress, according to Carl E. Rucker, test engineer of Dept. 6-7.

For instance, on a B-58 landing gear strut, it works this way: the strut is first covered with a special photostress soft plastic which can be formed to cover any type of regular or irregular surface.

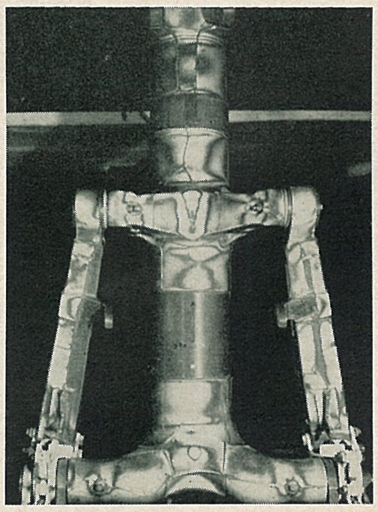
After application, the plastic hardens and is glued to the surface of the object to be stress tested.

Load is then applied to induce stress. As this goes on, an engineer looks through a special polaroid appliance called a field meter.

The polarizers in the field meter enable him to see the rainbow of colors the plastic takes on under differing amounts of stress—and enables him to measure the stress according to the colors which develop.

The engineer can pinpoint those areas which are put under the greatest strain. Engineers can then make certain that those points are strong enough to stand up.

Rucker, who aided Menasco Mfg. Co. in conducting tests at Convair on the B-58 landing gear, said this new optical strain gauge has many advantages over the standard process. With the new method, strain distributions can be seen and evaluated.



COLORFUL — This is what black and white camera "saw" when shooting through polarized field meter.

Midget and Formula K Race Track Planned Adjacent to Astro Plant

Construction work on what will ultimately be the only race track of its type in existence started last week in the CRA recreation area adjacent to the Astronautics plant.

The track will be used for quarter and half-midget racing for youngsters and a Formula "K" course for all ages. The track will consist of facilities for three types of racing. First there is a 2,000-foot Formula "K" road racing course, then an oval of approximately one-twentieth of a mile for smaller cars, as well as a road racing course for the midgets.

Present plans call for utilization of the track by September.

The venture is a joint one involving CRA and the Sunrise Optimists. About half of the area involved is in a deep canyon assigned to Astro, the remainder is being made available by a local contractor who owns the land.

One of the biggest jobs involves moving almost 100,000 cubic yards of dirt to complete the track. Parking and concession facilities will be provided.

When completed, the track will be used by the two types of racing cars on alternate Sundays, according to Jim Conklin, CRA commissioner.

Although token admission fees will be charged for national racing events held from time to time, all other activities will be free.

B-58 to Get Air Fueling, New Design Nacelles

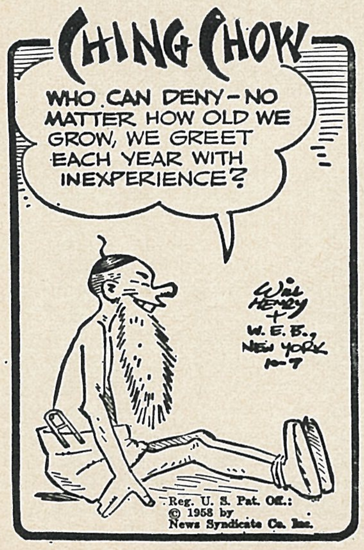
One of the Carswell Air Force Base supersonic Hustlers is back home at Convair Fort Worth where development people are modifying it for an Air Force accelerated service test program.

Modification actually got under way when Maj. J. R. Phillips taxied the aircraft to Convair after a brief test flight. Other B-58 Test Force members aboard included Capt. R. K. Markel, navigator, and Capt. H. S. Bialas, flight engineer.

After the B-58 touched down at Convair, R. W. McGuffee, development manager, J. E. Ivy, superintendent of development manufacturing and R. W. Dodd, superintendent of development field operations, were on hand to receive it. However, the Hustler was not signed over to Convair.

According to Jack Weir of development liaison, Convair will install newly-designed nacelles, aerial refueling and the ultimate fuel system.

"Engineering, manufacturing and all management coordination and support departments are making a strong effort to complete the work when due," Weir added. "We're to turn the plane back to the Air Force by July."



Convair FW Man Shot Climbing Into Car

M. J. Scott of Convair Fort Worth's suggestion section was in Saint Joseph's Hospital last week recovering from an accidental gunshot wound.

Scott accidentally shot himself in the side with a target pistol.



PRETTY "COLONEL"—Loretta Lodwig, daughter of Opal M. Lodwig, Convair Omaha office secretary, received title of honorary colonel of University of Omaha's Air Force ROTC at annual Military Ball recently.

Japanese Aircraft Executive Visitor

Motoo Takahashi, manager of aircraft department of Sekiya & Co., Ltd., Tokyo, Japan, renewed acquaintance with Convair San Diego friends last week while here inspecting the basic 880 jetliner.

His first visit to Convair SD was just two years ago, May of 1957, when he was here to receive instruction on the Convair-Liner 440 after his company's purchase of two of the transports. During his recent visit he was guest of A. P. Higgins, assistant to division manager-military relations.

H. G. Golem Appointed To U. S. Committee

Howard G. Golem, director of procurement for Convair, has been appointed to a two-year term on the Department of Defense Small Business Industry Advisory Committee, he was notified by Perkins McGuire, assistant secretary of defense for supply and logistics.

The advisory committee, composed of representatives of both large and small industry, meets twice annually to discuss problems arising in the field of the small business supplier.

Golem has been with Convair continuously since 1929, except for a brief period as vice president-manufacturing for a Texas aircraft firm in 1944, and has been director of procurement since Feb. 1, 1951.

Kuter Will Succeed Partridge in NORAD

Gen. Laurence S. Kuter has been named to succeed Gen. Earle E. Partridge as head of the North American Air Defense Command upon Partridge's retirement July 31.

General Kuter, now Commander in Chief, Pacific Air Forces, will be succeeded by Lt. Gen. Emmett O'Donnell Jr., now Deputy Chief of Staff, Personnel, at Hq. USAF.

As NORAD's commander, General Kuter will be responsible for defense against air attack for the North American continent. Key aircraft of NORAD are the Convair-built F-102A all-weather jet interceptors.

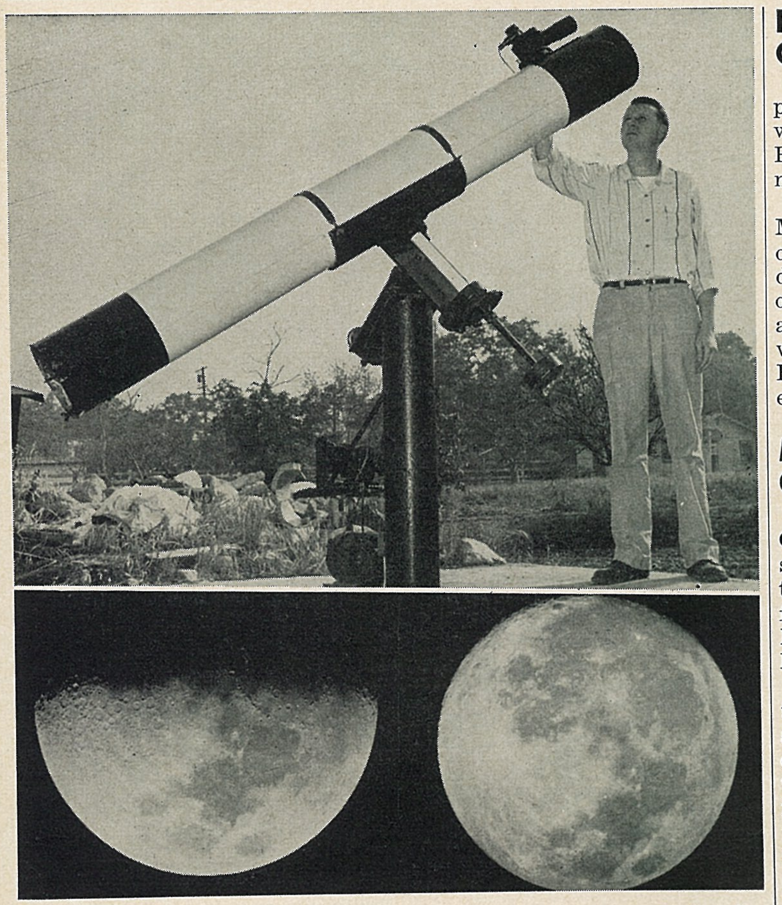
AIA Changes Name To Include 'Space'

The Aircraft Industries Association May 15 changed its name to Aerospace Industries Association to reflect the changing nature of the work being performed by the industry.

Gen. Orval R. Cook, USAF (ret.), president of A.I.A., said "by our definition, 'aerospace' embraces research, development and production of manned and unmanned vehicles and their supporting equipment for movement above the earth's surface, whether they move within the layer of atmosphere which surrounds our planet or beyond it."



"I would have sworn that you were trying to bring in something besides feet."



ASTRONOMER-PHOTOGRAPHER—Convair Pomona's Stanley Van Dusen (Dept. 27) is shown with reflective telescope and camera attachment, which he built himself (except for camera case) and with which he photographs stars, planets and constellations. Telescope has six-inch lens, which Van Dusen ground. Below are moon photos.

Pomona Hobbyist 'Space Visitor' Via Telescope Lo These 12 Years

The "space age" arrived 12 years ago for Convair Pomona's Stanley Van Dusen (Dept. 27), and he has been periodically "visiting" the stars and planets ever since—via a reflecting telescope he built himself.

"At the present time astronomy is about the closest approach to building a space ship and visiting the other planets," Van Dusen said.

An eighth grade teacher in Bakersfield initially interested Van Dusen in astronomy, and helped him build his first telescope, which had a four-inch mirror.

Later on, while in high school, he built his present telescope. This one, which is now located at his aunt's home in Ontario, has an eight-inch mirror and a clock-type mechanism which drives the polar axis to counteract the movement of the earth.

More recently he has become interested in photographing stars and planets, and has devised several methods of taking surprisingly sharp pictures. He has taken photos by placing a film holder of his own design directly over the viewing lens of the 'scope, and he also has a camera which can be attached to this lens. He also has taken pictures directly with a telephoto lens-equipped camera mounted on the telescope.

Some of his best pictures are color shots of Mars, taken when the planet made a close approach in 1957. He has also taken an excellent series of the moon in its different phases, and he has several of Saturn with its "ring" clearly defined.

Van Dusen said that he liked building telescopes equally as well as using them.

"Grinding and finishing the mirrors is one of the most exacting of hobbies," he said. "The mirror must be so accurate that it cannot be measured with a micrometer. The accuracy must be measured with light."

At present he is building a new telescope with a 10-inch mirror. He does all of his grinding and finishing by hand, and he estimates that a minimum of 45 hours is required to complete a mirror. He recently had the mirror for his new scope completed, except for a few finishing touches—and accidentally dropped and broke it. Now he must start all over. He hopes to have the entire project completed by the end of this year.

Industry-Education Conference Called

Convair Astronautics and San Diego men will participate in a conference co-sponsored by San Diego Industry-Education Council and San Diego State College next week.

The conference, aimed at stimulating increased productivity of scientists and engineers, will be held June 4-5 on the college campus.

Astronautics men taking active part in panel discussions will be George M. Robertson, assistant chief engineer, administration; J. W. Getzinger, training specialist; and Richard S. Campbell, chief of test laboratories. Representing Convair San Diego will be Dr. Arnold Small, staff specialist in human factors and acoustics.

ROTC Detachment Gets Convair Award

A "Certificate of Esteem" was presented by Convair — along with a scale model of the B-58 Hustler—to the ROTC detachment at TCU this month.

The presentation was made by Malcolm Holloway of the office of the special assistant to the division manager. It was made on the occasion of the ROTC's annual "Decorations Day," which was arranged by Lt. Col. Ardeene E. Sanders, professor of air science at TCU.

Fox Will Be Speaker On SD Electronics

W. W. Fox, chief engineer at Convair SD, will be the principal speaker at a meeting June 4 of the Western Electronic Manufacturers Association in the Toco Room of the Town and Country Hotel.

Fox will take "A Look at Electronics in the San Diego Division," following the 6:30 p.m. dinner. Fox's presentation is open to non-members of the WEMA interested in electronics. Reservations can be made with E. T. Clare, ext. 1566, Astro.

SD Naval Reservist Scores Pilot 'First'

Robert W. Henson (SD Dept. 6), commanding officer of a reserve helicopter anti-submarine squadron at Los Alamitos Naval Air Station, recently was the first West Coast reserve squadron helicopter pilot to take part in Atlantic Fleet activities as part of reserve training.

Commander Henson, an engineer in subcontracts at Convair SD, took part in helicopter exercises from the carrier USS Valley Forge, and with a submarine operating with Task Force Alpha in the Atlantic.



DRAW, FRIEND!—Members of "Thumbusters," a fast-draw club in San Diego, put on exhibition at recent Convair SD Horse Show. Convair SD shooters include (at far left) Jim Kuszai, Dept. 230, and (at far right) Ralph McKinsey, Dept. 180. Ken Newman (not shown) of Astro Dept. 775 is also fast-gun artist. All practice constantly and can draw and shoot in less than half-second.

Safe Slingers

'Gunmen' With Half Second Draw 'Plug' Their Targets With Wax

When three Convair "cowboys" hit town, dressed in the black garb of the professional gunslinger, holstered guns strapped tight to their legs, people are apt to get the impression three "outlaws" have escaped from a television western.

And, when in a blur of movement, hands flash to holsters, and thumbs cock hammers as pistols roll free of leather—all with speed that bewilders the eye—some spectators may get a little worried.

"Frankly, we create quite a stir, especially among the small-fry," Ken Newman (Dept. 775, Astro) said. Newman, along with Ralph McKinsey (Dept. 180, SD) and Jim Kuszai (Dept. 230, SD) are members of the "Thumbusters," the only fast-draw club in San Diego. They have appeared on television, at country fairs, and have had numerous other public appearances.

To keep in shape, they practice as much as two hours a day. All three can "clear leather" and shoot in less than a half-second. Fastest time to date is a draw that took exactly .18 of a second.

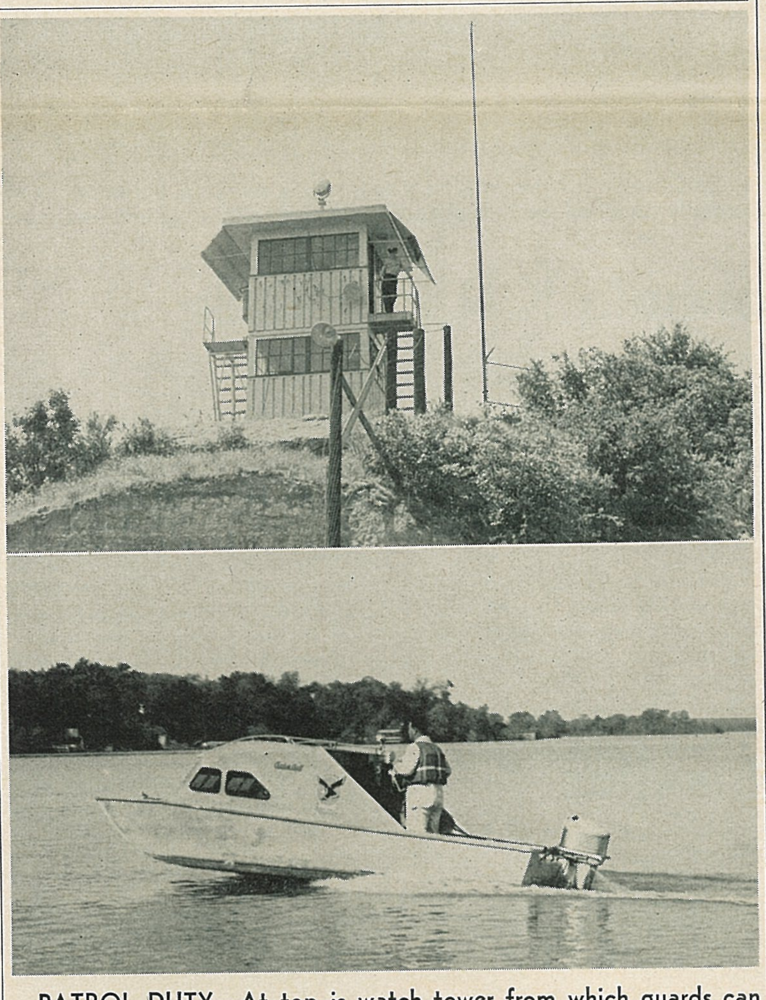
"I'm pretty sure we could show up some of the western heroes on TV," Newman says. "With us it's just a hobby, but we take it pretty seriously.

"Our guns are frontier-model Colts (1871), weigh about three pounds, and are perfectly balanced. Both the hammer and cylinder are lightened. The trigger pulls so easily the slightest pressure will set it off."

When practicing (and at exhibitions) the gun-slingers use wax bullets or blanks. On occasion they use "live" ammunition.

"But we have to be plenty careful when we do," Newman says. "It's not too unusual for the bullet to end up in your leg or foot. With wax there's no problem, but the doctor bill would get pretty steep with 'live' ammo. As a safeguard we insert a steel deflector plate in back of the holster.

"As for accuracy, we can knock a tin can off a post at ten yards about one out of three shots. That's drawing as fast as we can."



PATROL DUTY—At top is watch tower from which guards can spot anyone approaching FW plant by water. Below is 20-foot outboard used for patrol duty.

Lake Shore Patrol Halts Anglers Who Approach Too Near FW Plant

Boating on scenic Lake Worth which adjoins Convair Fort Worth is considered all work and no play for a group of nuclear engineers and industrial security people.

One guard summed it up pretty well to the tune of a standard pop song when he said, "I cover the waterfront."

Since the nuclear area is located near the Lake Worth waterfront, engineers and guards are responsible for patrolling a fenced-in area in the water near the Convair reservation shore line. The engineers patrol by boat, and the guards observe from a nearby outpost-looking lake tower nestled on a rocky, high cliff.

E. J. Brunner, nuclear test lab group engineer in charge of patrolling, said this is a safety precaution to keep fishermen, swimmers, skin divers, water skiers and sports boatmen from entering the area.

Taking turns around the clock at the lake observation tower are E. H. Southerlan, C. B. Shotwell, and D. L. Yeager. Southerlan's been there since the post first opened.

Although it resembles a much more expensive inboard vessel, the Convair boat is actually an economical outboard. It's about 20 feet long, has a small cabin and is equipped with a ship-to-shore radio.

"The boat patrols mainly at night," Denny Ross, one of the patrolling nuclear engineers, commented. "The guard can see pretty well during the day."

To help the guards at night, a searchlight, operated from inside the tower, can cut through the darkness and scan the fence line. The guards also have a loud speaker system to warn intruders to stay away from the environs of Convair Fort Worth.



"I don't mind tellin' you . . . when I glanced at th' clock and realized you were waiting for me, I had some anxious moments . . ."

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

* * *

Canadair Ltd. Wins $70 Million Contracts For 15 CL-44 Airplanes

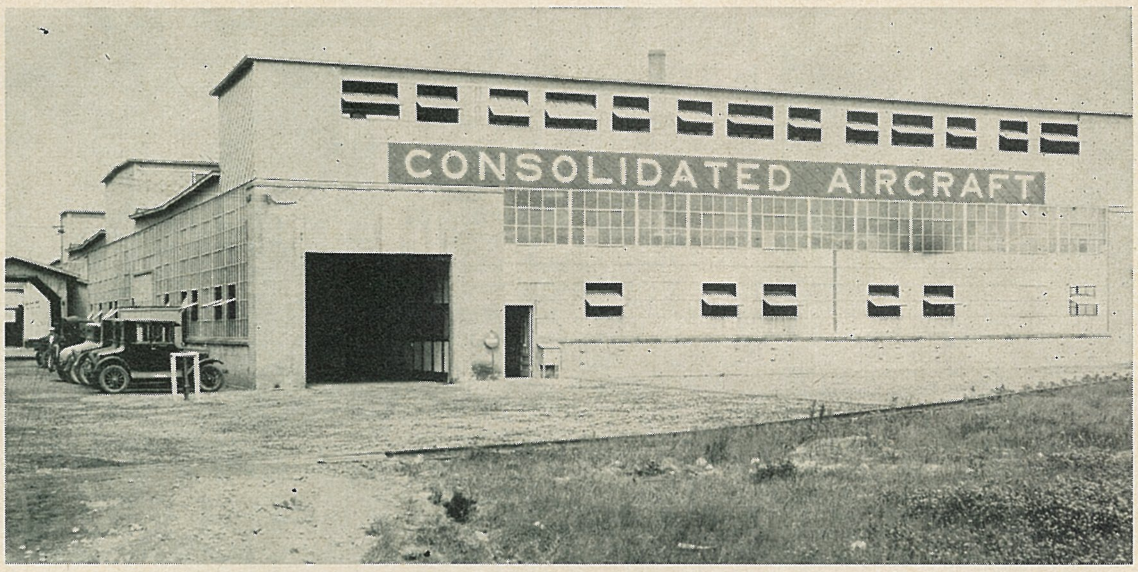
MONTREAL—Canadair Limited, Montreal subsidiary of General Dynamics, has sold fleets of jet-prop long-range CL-44 transport aircraft, of a unique new design, to the two largest all-cargo airlines in the United States.

They are Flying Tiger Line Inc., with headquarters in Burbank, Calif., which ordered 10 of the aircraft, and Seaboard & Western Airlines, Inc., of New York, which ordered five. Total cost involved is about $70 million, including spares. In addition, each airline has taken an option on five more of the airplanes.

The sales of these aircraft are hailed in Canada as a major breakthrough for the Canadian aviation industry. J. Geoffrey Notman, president of Canadair Limited, said that "this marks the first time that Canadian-built airplanes have been sold to any United States airline, and the first orders to be placed by any airline for a long-range turbine-powered air freighter."

"The immediate effect on employment at Canadair," said Notman, "is that some 4,500 people who might otherwise be out of work soon will find continued employment, and there is every indication that we shall have stable employment until at least the middle of 1961."

The CL-44 features a tail section which swings aside to permit easy end-loading of cargo through the rear of the fuselage. This gives it the capability of transporting outsize cargo, such as heavy trucks and missiles.



NEW HOME—Consolidated Aircraft set up housekeeping here in 1924. Scene was at Buffalo, N.Y. Note Model T Fords at left. Founder Reuben Fleet was driving one when he first arrived at new plant. He later switched to Stutz Bearcat.

Drawn by Supply of Skilled Labor, Consolidated Moves to Buffalo, N.Y.

(Herewith another installment in Convair's fascinating history that goes back to aviation's early days.)

After winning an Army contract to build 50 PT-1 trainers (**Convairiety**, April 29) the question Consolidated Aircraft faced was where to build them.

Reuben H. Fleet, who had founded Consolidated in 1923 at East Greenwich, R. I., looked toward Buffalo. A supply of skilled aircraft labor was the determining factor. The Curtiss and Elias companies were operating there, and a residual labor pool remained from heavy wartime production. The huge North Elmwood Avenue plant that Curtiss had given up after the war offered room aplenty, and more in view for expansion (floor space covered 37 acres).

Consolidated signed a 10-year lease with the American Terminal Warehouse Corp. on Sept. 22, 1924. It embraced 28,351 square feet, with option to expand if business warranted. (By 1931 Consolidated covered 236,000 square feet.) The rent was 25 cents a foot annually, heat and watchman service provided.

The first to arrive at Buffalo was not a Consolidated man but Lt. James Kelley, the new Air Service representative. (He was destined to join Consolidated in 1929, become a director and serve as World War II factory manager at San Diego. He is still with Convair, serving in General Offices.) The young officer waited several weeks before Fleet drove in from Rhode Island in a Model T Ford coupe.

"I remember the Model T so well, because it wasn't long before the major was driving a Stutz Bearcat," Kelley recalled recently.

Fleet at once set a crew to work unloading the three freight cars that had brought all of Consolidated's equipment, stock and records from East Greenwich.

The PT-1 contract was a novel one. The trainers were to be built in increments of 10, with the first four going immediately to the Army for testing. Any modification desired would be included by the contractor in the next 10, without additional charge. By the time the 34th trainer came off the line, Fleet received telegraphic notice from McCook Field that nothing more was wanted in the way of changes.

The Navy became a Consolidated customer in 1925 and eventually bought more than 300 planes of the NY-1 and NY-2 trainer series. These were similar to the Army PTs, but were convertible to water use with a central pontoon and wing tip floats. The Navy employed the air-cooled Wright Whirlwind engine from the beginning. (The first 220 Army trainers had the water-cooled Wright E. Hispano engine.)

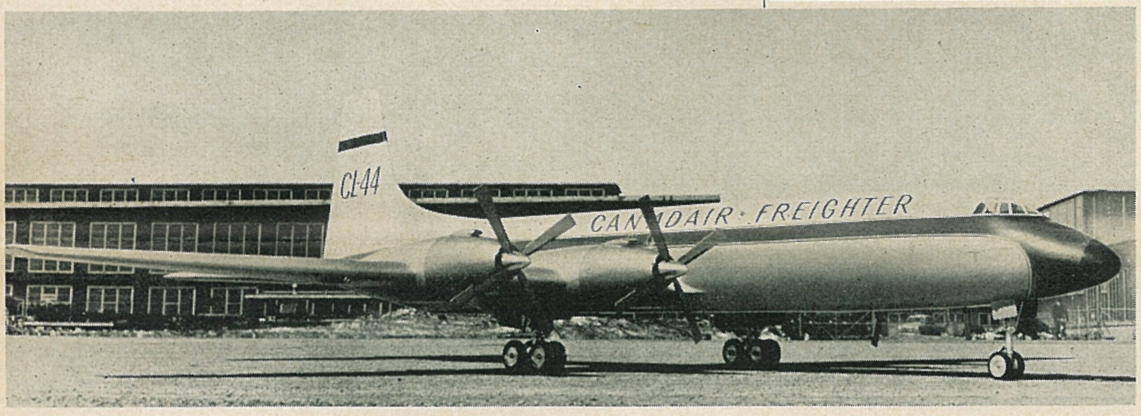
"The way to stay in business with the Army and Navy is to give them your best without any holding back," Fleet has said. "Sometimes we gave them what was best before they knew it themselves."

Unlike the Army, which negotiated successive contracts on the basis of a single design competition, the Navy called for a new competition each time it wanted trainers—even as few as 10. Fleet always entered these competitions personally, shipping a demonstrator plane to Pensacola and flying down a mechanic from Buffalo. Fifteen manufacturers entered the 1925 contest, which brought Consolidated an order for 20 NY-1s.

By the end of 1926 Consolidated could boast that its trainers "have been in the air for more than 30,000 hours, and more than 600 students have received flying training in them. . . To date no student has been killed or even injured severely enough for hospitalization."

In its report to Jane's Aircraft for that year Consolidated stated it had "maintained close personal contact with the operating personnel of both services, observing, analyzing and correcting each service difficulty as it arose."

One of the first difficulties after planes were sold to the Navy was corrosion. Zinc plating that stood up on land planes broke down quickly when exposed to salt water. Adoption of cadmium plating proved the answer. Internal corrosion of structural tubing became negligible after a technique was perfected for coating the inner surface with oil, then sealing out the air with tight joints in welding.



THIS IS CL-44—Canadair's long-range turboprop transport, CL-44, is shown here.

Electric Boat Will Launch First Submarine Of New Class, To Be Armed With Polaris

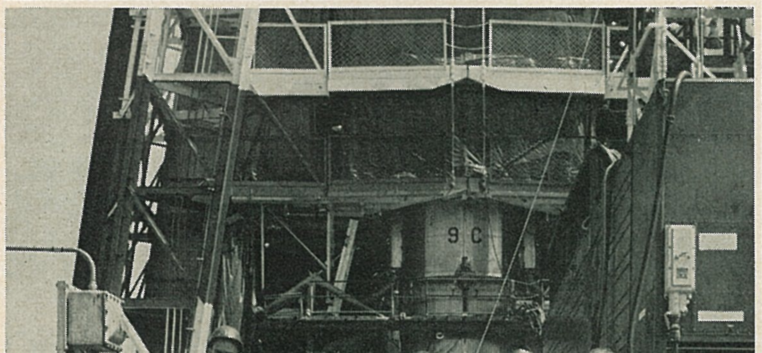
GROTON—The Navy's first fleet ballistic missile submarine, the George Washington SSB (N) -598, will be launched here at Electric Boat Division June 9.

The submarine is the first of an entirely new class designed to fire the intermediate range Polaris missile from either submerged or surface positions.

Christening will be by Mrs. Robert Anderson, wife of the Secretary of the Treasury. Speakers will include Wilfred J. McNeil, Assistant Secretary of Defense; Rear Adm. William F. Raborn, head of the Navy's Special Projects Office; and Frank Pace Jr., chairman of the General Dynamics Board of Directors.

STROMBERG-CARLSON MANAGER NAMED

ROCHESTER—Fred P. Ciambrone has been appointed area communications system manager for the Electronics Division of Stromberg-Carlson.



SPECIAL GUESTS—Among recent visitors at Astronautics facility in Florida was group from Canadair, Ltd., shown with hosts at one of complex areas with missile in background. They were in Florida on missile training program. B. G. MacNabb, far right, Astro base manager, was host.

High-Speed Microfilm Printer Announced

SAN DIEGO—Equipment capable of recording computer output data on microfilm at the rate of 15,000 characters per second has been announced by Stromberg-Carlson at San Diego.

Named the S-C 4020, the compact microfilming unit is capable of plotting 15,000 graph points per second and of drawing axes, projecting grid backgrounds, and printing vectors, eliminating the need for clerks to read from volumes of computer output data in order to plot graphs by hand.

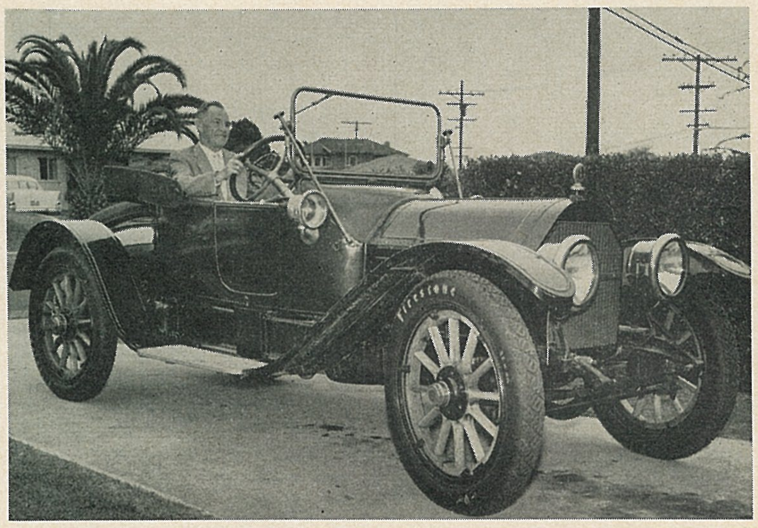
Bomarc Components Shipped by Canada

MONTREAL — Canada began on-schedule deliveries this month to the United States of the first items to be produced under the new "defense production sharing" arrangements between the two countries.

Sets of wings and airlerons for Bomarc ground-to-air missiles produced by Canadair Limited under a sub-contract arrangement with Boeing of Seattle, were shipped from Montreal this afternoon. The missiles are for USAF.

Sub Will Be Named After Ethan Allen

GROTON—One of the newest of the Navy's Fleet Ballastic Missile submarines will be named for America's frontier hero, Ethan Allen, who led the Green Mountain boys of Vermont. The submarine, on which construction will start this summer at Groton, is the lead ship of a new class of Fleet Ballistic Missile submarines.



JAUNTY—James L. Kelley, veteran Convair man who was first to arrive when Consolidated moved to Buffalo in 1924, poses in early day Cadillac similar to cars that were on roads in those days. Cadillac is owned by Gerry Wright of SD Dept. 6.



SILVER ANNIVERSARY—Paul DiGiulio, Dept. 400-1, completed 25 years service with Convair early this month. Now a T&O planner, he joined Consolidated Aircraft in Buffalo, N.Y.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period May 16 through May 31.

Twenty-five-year: Dept. 6-51, L. O. Cederwall; Dept. 25-1, M. J. Hayman; Dept. 101, Leo Budzynski.

Twenty-year: Dept. 216, F. C. Buzzelli; Dept. 288-3, R. A. Woods.

Fifteen-year: Dept. 6, H. E. Seibert, S. S. Tchemessoff; Dept. 15-5, L. F. McCoy; Dept. 31, J. I. Lockout, L. O. Rainer; Dept. 97-0, O. G. Downs; Dept. 171, R. N. Hane; Dept. 280, W. W. Mansir; 603-0, R. M. Shuck.

Ten-year: Dept. 3-4, Bernice H. Dickey; Dept. 6-51, C. L. Glasson; Dept. 14-4, V. A. Johnson; Dept. 15, C. S. Booraem, C. J. Harrell, P. B. Lyons.

Dept. 31, E. G. Hopster; Dept. 97-7, M. M. Crabtree; Dept. 101, Adolph Kapchinske; Dept. 102, J. A. Pelkey; Dept. 149, Christine Bussey; Dept. 160, C. F. Heyden; Dept. 171, D. R. Miller; Dept. 188-8, Naomi M. Williams.

Dept. 192-5, Opal P. Moore; Dept. 218, Helen M. Johnson; Dept. 223, Santiago Bumanglag; Dept. 231, J. H. Marquez; Dept. 267, R. W. Forney, Walter Franzak, R. E. Vanlandingham.

Dept. 280, Anna S. Branson; Dept. 288-8, J. W. Barrett; Dept. 400-2, W. H. Mills; Dept. 403, Mary W. Davis, J. L. Vidovich; Dept. 406, William Ness.

Promotions

SAN DIEGO

Promotions to or within supervision effective May 11.

Dept. 3-1, Industrial Relations: To fire chief, I. K. Wisley. To fire lieutenant, T. G. Champlin, P. J. Gute.

Dept. 6, Engineering: To chief of thermo lab, R. F. Holmes. To thermo group engineer, J. W. Anderson, J. A. Brown, R. A. Nau, G. B. Nicoloff. To engineering planning & estimating asst. supervisor, M. W. McCreary.

Dept. 192-1, Plant 1, Manufacturing Control. To M/C asst. foreman, H. J. Dwiere.

Dept. 292, Plant 2, Manufacturing Control: To M/C asst. foreman, R. B. Bailey, T. M. Edwards, F. E. Hamlin Jr.

Personals

SAN DIEGO

I am sincerely grateful to Convair friends, particularly those in Dept. 14, with whom my husband, T. F. Grogan, worked before his retirement, for the many expressions of kindness during his illness and at the time of his death.

Mary Lou Grogan

* * *

The cards, beautiful flowers, personal calls and other tokens of friendship from Convair people at both Plants 1 and 2, during my recent illness, meant so much to me. Your kindness will always be remembered.

Sylvia Jones, Dept. 98-6

Births

SAN DIEGO

JAMES—Son, Scott Marshall, 7 lbs., born April 13 to Mr. and Mrs. A. (Whitey) James, Dept. 14-4. Mother, Mrs. Ione James, on leave from Dept. 288-2.

WILLIAMS—Son, James Timothy II, 8 lbs., 2 oz., born May 13 to Mr. and Mrs. James Williams, Dept. 603.

WYATT—Daughter, Lore Mae, 7 lbs., 11 oz., born May 12 to Mr. and Mrs. Jesse Wyatt, Dept. 109.

Deaths

SAN DIEGO

SPENCER—Walter J., Dept. 188-9. Died May 13 in Los Angeles. Survived by wife, Margaret A.

Shop Softball Play Held Twice Weekly

Convair SD shop league softball games are now being played every Monday at Memorial playground, 2902 Marcy St., and Presidio playground, 2811 Jackson St. Games are also played on Fridays, but at Presidio only. Doubleheaders are played on both days with the first game starting at 6:45 p. m. Spectators are invited to attend.

18,000 Targets Up In ATA Trap Shoot

One hundred and fifty entrants, shooting at 18,000 targets, May 17 set one of the all-time high attendance records for a shoot sponsored by the Convair SD Gun Club.

Jack Swank, commissioner, said the first targets were thrown up at 8 a.m. and things were still going strong at 6 p.m. The affair was a registered ATA trap shoot which gave contestants an opportunity to record targets under the auspices of the American Trapshooting Association.

Two Convair men managed to snag honors in the field which included many out-of-towners. George Clayton (SD Dept. 115) won the Class C 16-yd. division while George Anderson of Astronautics took the doubles championship.

Swank said the next shoot at the Gillespie Field Range will be held Sunday (June 7). It will be a "blind bogey" shoot and winners will be given two tickets for steak dinners at the Cotton Patch restaurant.

Shooters Exchange Honors in Tourney

B. L. Broadway (Dept. 603) and Joe Williamson (Dept. 401) traded top honors in a Convair SD pistol match May 10.

Broadway took the .22 police course event with a score of 291 and Williamson won the center fire short national with 272 points. In the latter Broadway placed second while Williamson was the runner-up in the police course event.

R. D. Miller (Dept. 600) and Carl Hornburg (Dept. 166) were ranked first and second in the expert class and Dale Young (Dept. 31) and Dorcas Utter ended up one-two in the sharpshooter class.

W. L. Dittmann (Dept. 6) placed third in the center fire short national. Ash Bishop, CRA commissioner, said that the .22 caliber night shoots at the San Diego Police Pistol Range started their summer schedule on May 19.

Eight Teams Enter SD Handball League

Eight teams have entered handball competition at Convair SD, Pete Beyrer, commissioner, announced. First games were played at the city YMCA May 23.

Each of the matches consists of the best two out of three 21-point games. A total of 14 games has been scheduled.

Teams entered include Electrical, Part Sales, Dept. 93-2, Dept. 149, Aerodynamics, Dept. 120, Drafting and Schoolboys.

Management Golfing Deadline Is Today

The National Management Association Golf Tournament will be held June 6-7 at the Ojai Valley Country Club near Ventura, Calif.

Entries for the tourney close today (May 27).

The novel "shotgun" method of starting will be employed with golfers teeing off from all 18 tees at the same time to eliminate the wait on the first tee.

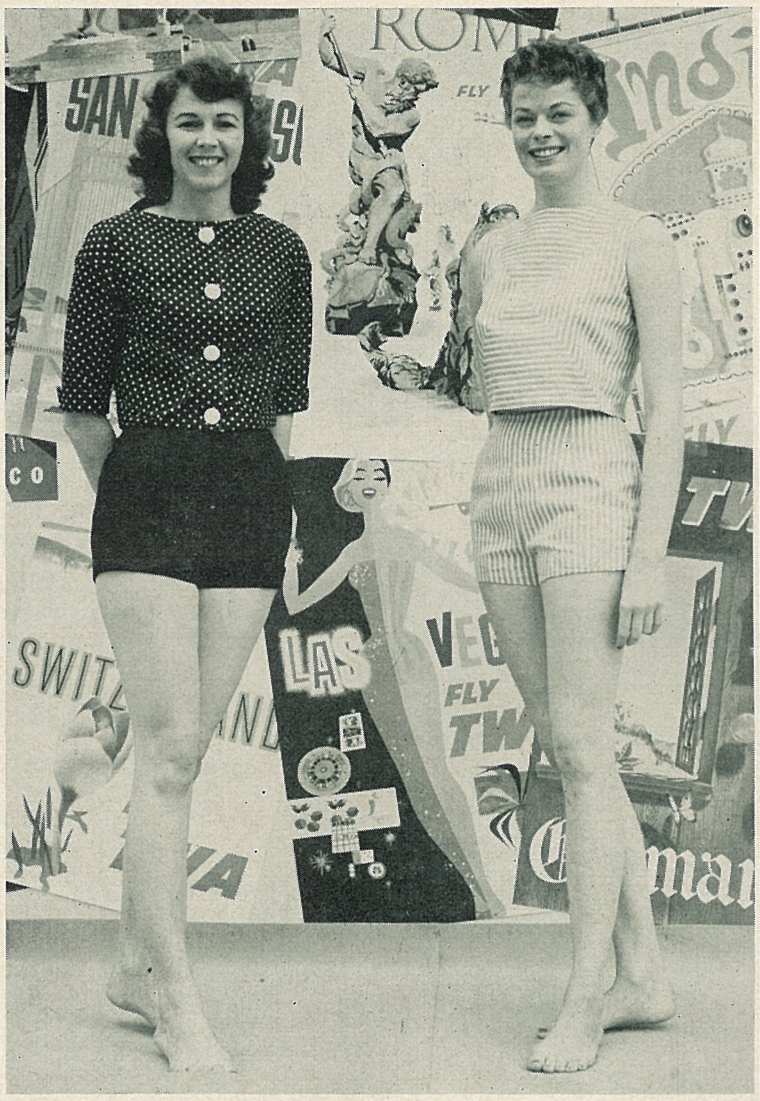
Management Club members can obtain additional information from Russ Davis, ext. 423, Plant 2, after 3:30 p.m.

Keg Championship Results Now Ready

Lists of winners and prize money for the Convair SD plant Bowling Championship Tournament are now available at employee services, Plant 1, Jim Hayman, commissioner, said.

Results can be obtained by calling ext. 1245, Plant 1.

The annual awards banquet has been set for June 20 starting 6:30 p.m. at the Admiral Kidd Officer's Club. Reservations for champions and guests can be made by contacting Hayman, ext. 1155, Plant 1.



CONVAIR MODELS—Camera Club members at Convair SD picked pretty Marie Hilliard, Dept. 2 (on left), and Susan Beatty (Dept. 15) to represent them at San Diego Photorama. Set was designed by club members Al Bennett and Ray Grant.

Jeep Club Desert Expedition Marked by Plunge into Canyon

A hazardous 30-mile trip in a jeep that took all day, and a 75-ft. plunge off a cliff, marked a "typical" outing May 16-17 of the San Diego Ridgerunners that was well attended by members of the Convair SD Jeep Club.

The caravan left Indio Saturday morning, driving 35 miles into the Santa Rosa mountains over old fire trails through the National Forest Reserve. The return trip was made the next day after an overnight camp-out.

A father and son, driver and passenger, escaped with minor injuries when their jeep hit a boulder, overturned, and spun off a 75-ft. cliff. Oscar Estes, Ridgerunner club president, winched the jeep out of the canyon Sunday morning. It was the only mishap of the trip.

Striking out on his own Sunday morning Art Thomas (Dept. 25), club director, took a "straight as the crow flies" jaunt from Truck Haven to Ocotillo. The 30-mile trip over sand and gravel hills ranging from 1,000 ft. in height to below sea level was across some of the roughest terrain he had ever attempted, Thomas said.

In the process, Thomas said three new tires on their first trip went flat, generator and regulator burned out, tail lights were smashed and fenders bent. It took all day to cover the 30 miles!

A less strenuous outing is planned June 14 when Convair jeep owners are invited on an all-day family trip which will depart from Jacumba on Highway 80 at the All Night Restaurant at 9:00 a.m. Anyone interested should call Thomas on Wednesday evenings, 5-7 p.m., at HI-4-1758.

Five Years Ago . . .

Following are brief excerpts from Convairiety of five years ago:

★ ★ ★

Convair-built YC-131C, nation's first twin-engine turboprop military transport, is readied for Air Force acceptance at FW.

* * *

CIP program is placed in effect at Convair Pomona.

* * *

A. C. Esenwein, Convair FW Division manager, reveals manhours to build B-36s have been slashed from 350,000 per plane to 142,000 per plane.

* * *

Total firm orders for Convair-Liner model 340s rise to 205 with announcement that Saudi Arabia Airlines, Inc. has purchased four.

* * *

Plans are revealed at Convair SD to build towing basins for model seaplanes at the seaplane ramp.

* * *

Canadair Limited personnel pay first visit to Convair FW to study metlbond process of metal adhesive.

Engineering Wins Volleyball Title

A Structures volleyball team, which had plowed through its American League slate of games without a loss, suffered its first defeat and with it lost the plant volleyball championship recently at Convair SD.

Industrial Engineering, the winner of the National League, swept the first two games 15-8 and 15-4, lost the third 16-14, then went on to win the championship with a come-from-behind rally 15-13. Individual trophies were given by CRA.

Archers Host Border Meet This Weekend

State and national archery champions are expected this weekend to enter the second annual Southern Border Archery Association trophy shoot, hosted and sponsored by the Convair Archery Club at the Kearny Mesa Range.

Spectators are invited to turn out for the event which will be held May 30-31. Registration opens on Friday (May 29) at 2 p.m. and will remain open until 8 p.m. Registrations will also be taken Saturday morning, between 8 and 10.

Al Phipps, tournament coordinator, said local television coverage of the shoot is expected. He said every phase of archery, both field and target, will be covered in the tourney. Winners will be officially crowned champions of the sport in the Southern California area.

Twenty events are scheduled for the two-day shoot. Trophies will be awarded first-place winners and medals will go to runners-up. However, to be eligible for trophies, archers must shoot on both days. Bowmen entering for one day will be able to compete for medals.

In preparation for the event, Phipps said parts of the range have been relaid to give better vantage points for spectators with complete safety. Acres of free parking will be available.

Additional information can be obtained by contacting Gil Crosthwaite of the CRA office, afternoons, ext. 1245, Plant 1.

SD Stamp Clubbers Halt for Summer

Meetings of the Convair SD CRA Stamp Club will be discontinued during the summer in accordance with the customary procedure, Jack Benedict, commissioner, said last week.

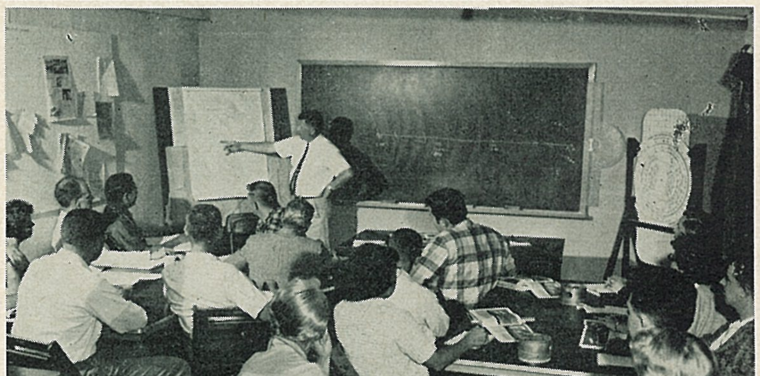
Benedict said the regular schedule of meetings and events would start up again in September. Meetings then will continue to be held the first Thursday of each month at 7:30 p.m. in the Conference Bldg., Balboa Park.

Convair Son, Harvard Student, Honored

A Convair San Diego son has been singled out for one of the oldest awards given at Harvard University.

Deward F. Manzer, 20, son of Robert A. Manzer of Dept. 34-1, was one of the 67 top scholars at Harvard to receive the "Detur" award, a book prize provided by a fund in existence for 301 years. The award title is derived from the Latin, "Detur Digniori," meaning "to the more worthy let it be given."

A sophomore at Harvard, Deward is majoring in applied physics.



FLYING SCHOOL—Ground school students from Convair SD, who completed course last week, get final briefing from instructor Rex Robinson (at map). Registration is now open for another 18-week course, sponsored by CRA Solo Flyers, scheduled to start June 1 and 3 at Jim's Air Service. For information contact Robinson, ext. 1636, Plant 1.



OPEN FOR BUSINESS—CRA commissioners gave new Gillespie Field clubhouse (center) the "once-over" when they held May meeting at the El Cajon location. Among features are picture windows with panoramic view overlooking valley, fireplace, excellent meeting accommodations and many others. Left: CRA commissioners assembled for group shot. Right: Danny Whorton, CRA president, and Tony Berardini (on left) discuss business to be transacted at meeting.

CRA Aeromodelers Start 'Training' For Model Airplane Championships

CRA Aeromodelers at Convair SD have planned two contests—one June 14, the other July 5—as prelims to the National Model Airplane Championships to be held July 28 to Aug. 2.

Both CRA contests will be held at the Clairemont-Mesa field, located (on north side) between the Astronautics Plant and Clairemont Blvd. Meet hours are from 8:30 a.m. to noon.

Purpose of the contests is to promote perfection through practice and to facilitate picking the five-man team which will represent the Aeromodelers in the Nationals. The team will compete for the National club championships as well as individual honors.

Both CRA meets will include all recognized outdoor events except U-Control. High time winners will receive merchandise certificates redeemable at Mike's Model Shop in El Cajon or the San Diego Model Shop on Park Blvd.

Gary Witt, Aeromodeler spokesman, said the opportunity for the CRA club to compete in the Nationals, which will be held at Los Alamitos Naval Air Station this year, only rolls around once every four years. It is usually held at points in other parts of the country, too far away for the club to participate, he said.

The CRA Aeromodelers club is a charter member of the Academy of National Aeronautics and all local meets are held in accordance with the rules of the parent organization. A calendar of events is published periodically by the club. For additional information contact Witt, ext. 2405, Plant 1.

Sea Bass Wins Fishing Prize

A 122-lb., 4-oz. black sea bass caught by Mark Miranda (SD Dept. 4) recently won Fish of the Week honors in San Diego and also took the fourth prize in the April fishing contest sponsored by the Convair SD Fishing Club. Miranda caught the huge bass on a 30-lb. line in La Jolla Cove after a 45-minute fight. Lines usually used for catches of this size are in the 40 to 90-lb. class, Dale Cromartie, commissioner, said. He also noted that last year not a single black sea bass had been entered in the CRA contest.

Other winners in the contest included a 10-lb. barracuda caught by C. L. Moore (Dept. 21-2) which took the first prize. Ruth Menzie and R. W. Menzie (Dept. 402) placed second and third respectively with 14-in. and 12½-in. rainbow trout.

The catches of Miranda and Moore also qualified them for button awards.

Convair Eliminated In Softball Tourney

A 2-0 defeat last week at the hands of Quaff Barrel knocked the Convair SD "A" team out of the San Diego pre-season softball tournament.

It marked the second defeat in the double elimination tourney for the Convair team. They had previously been edged out 3-2 by Southeast Merchants. A revenge of sorts was achieved in the tourney when Convair blanked the Merchants 8-0 in a second encounter. On their way to the quarter-finals the local entry picked up victories over Casa Club, 2-0, and Ryan, 8-1.

Last Call Sounded For Tennis Players

"There's a definite danger that tennis may fall by the wayside as a CRA activity," Gil Crosthwaite, acting tennis commissioner, said last week.

"To avoid that possibility we are asking everyone at Convair SD interested in playing tennis to attend a last-ditch meeting in the CRA Clubhouse on Pacific Hwy. tomorrow (May 28) at 5 p. m.

"The future of the club will depend on the turnout at the meeting. If sufficient response is indicated we will elect officers and plan a schedule of events for the club," Crosthwaite said.

CRA *Sports & Recreation* Convairiety

Fishing Club Announces Annual Father-Son Derby

One of the most popular outings sponsored by the CRA Fishing Club at Convair SD, the annual Father-Son-Daughter Fishing Derby, this year will be held June 20.

Tickets go on sale June 1. M. V. Clark, chairman of the derby, urged interested dads to purchase tickets as soon as possible to avoid disappointment. "This year's derby has been limited to 24 tickets," Clark explained. "Prices have been set at $15, total cost for father and son or daughter."

Youngsters making the trip must be under 17 years of age. The agenda includes an action-packed day of deep-sea fishing from the fishing boat Kiora, chartered by the CRA club for the occasion. It will depart Fisherman's Wharf June 20 at 1:30 a.m.

Tickets for the affair can be obtained from Bill Gille (Dept. 25), ext. 2551, Plant 1; or Glenn Grantham (Dept. 230), ext. 583, Plant 2.

Five SD Linksmen Win Golf Flights

Five Convair SD golfers won flight championships in the San Diego Industrial Golf Tourney held at Torrey Pines this month.

D. G. Sliger (Dept. 6) won the eighth flight; Ken Eastin (Dept. 6-35), the ninth; Lin Richardson (Dept. 401), 10; Scotty Rutherford (Dept. 146), 11; and Mike Valin (Dept. 138), 14.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

AEROMODELERS — Flying competitions June 14 and July 5, Clairemont-Mesa Field at 8:30 a.m.

ARCHERY—Annual Southern Border Archery Assoc. trophy shoot May 30-31, Kearny Mesa range. Pre-registration at range May 29, 2-8 p.m., or day of shoot, 8-10 a.m.

ART CLUB — Life drawing classes each Tuesday, 7 p.m., Convair studios, Spanish Village, Balboa Park. Register with Gil Crosthwaite, ext. 1245, Plant 1, after 1 p.m.

ASTRONOMY—Slide show of moon at June 5 meeting, 8 p.m., CRA Clubhouse, Gillespie Field.

BADMINTON—Organized play and instruction every Tuesday, 7:30 p.m., Federal Bldg., Balboa Park.

BOWLING — Awards banquet June 20, 6:30 p.m., Admiral Kidd Officer's Club.

BRIDGE CLUB—Session June 2, 7:30 p.m., Barcelona Hotel, 4th and Juniper Sts.

CHESS CLUB — Meets each Wednesday, 7:30 p.m., CRA Clubhouse on Pacific Hwy.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse on Pacific Hwy.

FISHING CLUB—Tickets go on sale June 1 for Father-Son-Daughter Fishing Derby June 20.

GUN CLUB—Next shoot June 7 at Gillespie Field Range.

JEEP CLUB—Jacumba outing June 14. Contact Art Thomas Wednesday evenings, 5-7 p.m., HI-4-1758.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admission: adults, 25c; children, 10c.

RADIO CLUB — Meeting tomorrow (May 28), 8 p.m., at Harbor Drive headquarters.

SOFTBALL — Special meeting for second-shift departments wishing to enter league competition tomorrow (May 28), 2 p.m., CRA Clubhouse, Pacific Hwy.

SOLO FLYERS—New ground school course starts June 1 and 3 at Jim's Air Service, Lindbergh Field. Contact Rex Robinson, ext. 1636, Plant 1.

SPORTS CAR CLUB — Meeting June 3, 7:30 p.m., Natural History Museum, Balboa Park.

STAMP CLUB—Meetings discontinued for summer.

SWIMMING—Next free swim night Saturday (June 6), 7-9:30 p.m., Mission Beach Plunge. Tickets at employee services, both plants, and from departmental representatives.

TENNIS — Meeting tomorrow (May 28) at 5 p.m., CRA Clubhouse on Pacific Hwy.

WATER SKI CLUB — Trip planned June 6-7 to Salton Sea. Meeting June 2, 7:30 p.m., Gillespie Field CRA Clubhouse.

French Elected By Radio Club

New officers of the Convair SD Radio Club were installed for the 1959-60 term May 16 at a dinner meeting, J. B. Baker, commissioner, said last week.

Stepping in as the new president is Howard French, K6EDA (Dept. 188). Other officers include Roger Allen, W6MWV (Dept. 6), vice president; Ralph Cummings, WA6CPQ (Dept. 402), secretary; and Jim Lack, WA6CYD (Dept. 6), treasurer.

James Grimsby, K6IAF (Dept. 31), the outgoing prexy who had served for two years, was given an inscribed gavel.

Thirty-eight club members were present for the installation at the Henry Langhorst Restaurant in La Mesa. French claimed an additional victory when he was awarded one of the drawing prizes. Other winners were Mrs. Ted Laukemper (wife of Ted Laukemper, Dept. 188) and Mrs. Fred Sickler and Fred Sickler Jr. (wife and son respectively of Fred Sickler, Dept. 110).

Baker said plans are being laid for the club to participate in the annual Field Day, sponsored by the American Radio Relay League of San Diego, June 27-28.

CRA Discount Tickets

DISNEYLAND — Magic Kingdom Club membership cards allowing purchase of discount tickets at park box office.

MARINELAND — Discount tickets available for all ages.

NORM'S GYM — Half-price memberships offered men and women to Norm's Gym, 3461 Ingraham St.

OLD GLOBE THEATER — Reduced-price tickets to June 7 performance of "The Man Who Came to Dinner."

PADRES BALL GAMES — Discount tickets to June 3 home game.

SKATING DERBY — Discount tickets to derby at San Diego Arena, May 28, 8:30 p.m.

WINDJAMMER — Discount forms available for film now showing at Fox Theater, 7th and B Sts.

SD Riders Invited To Ranch Activities

A variety of events are now being held monthly at the Flying Hills Ranch which members of the Convair SD Riding Club are invited to attend, Marc Beresford, CRA commissioner, said last week.

Included are breakfast rides, special instruction and gymkhana events, and fun shows. Beresford asked those desiring information to contact "Dave" Davidson, the ranch foreman, at HO-6-8449.

A special event with a hot dog roast will be sponsored June 6 by the junior members at the Flying Hills site.

Looking ahead to the future, Beresford said a special horsemen's clinic, with leaders in various branches of the horse world on hand, will be held sometime in August. He said this will be one of the outstanding events of the '59 season. Some of the subjects covered will include care and management of horses and qualities judges look for in judging horses and riders.

Perry, Letsinger Win Photo Honors

Winners of the Convair SD Camera Club's second quarterly contest, judged by Charles Sick, assistant manager photographic department, Union-Tribune Publishing Company, were announced last week.

Awards for the best color slides went to A. P. Perry (Rose Canyon), E. F. White (Dept. 6) and Joan Ainsworth (wife of Ron Ainsworth, Dept. 6). Gary R. Letsinger (Dept. 6) was the winner of the black and white competition.

The June 8 meeting at 7:30 p.m. in the Photo Arts Bldg., Balboa Park will include a Kodak slide show, "Pictures Outdoors at Night." It will be followed by a session of night shooting. Members are asked to bring cameras and tripods and visitors are invited to attend.

20 Cars Journey To Green Valley

Sixty people piled into 20 cars May 17 to attend a breakfast run to Green Valley Falls, sponsored by the Convair SD Sports Car Club, Skip Carpenter, club president, said last week.

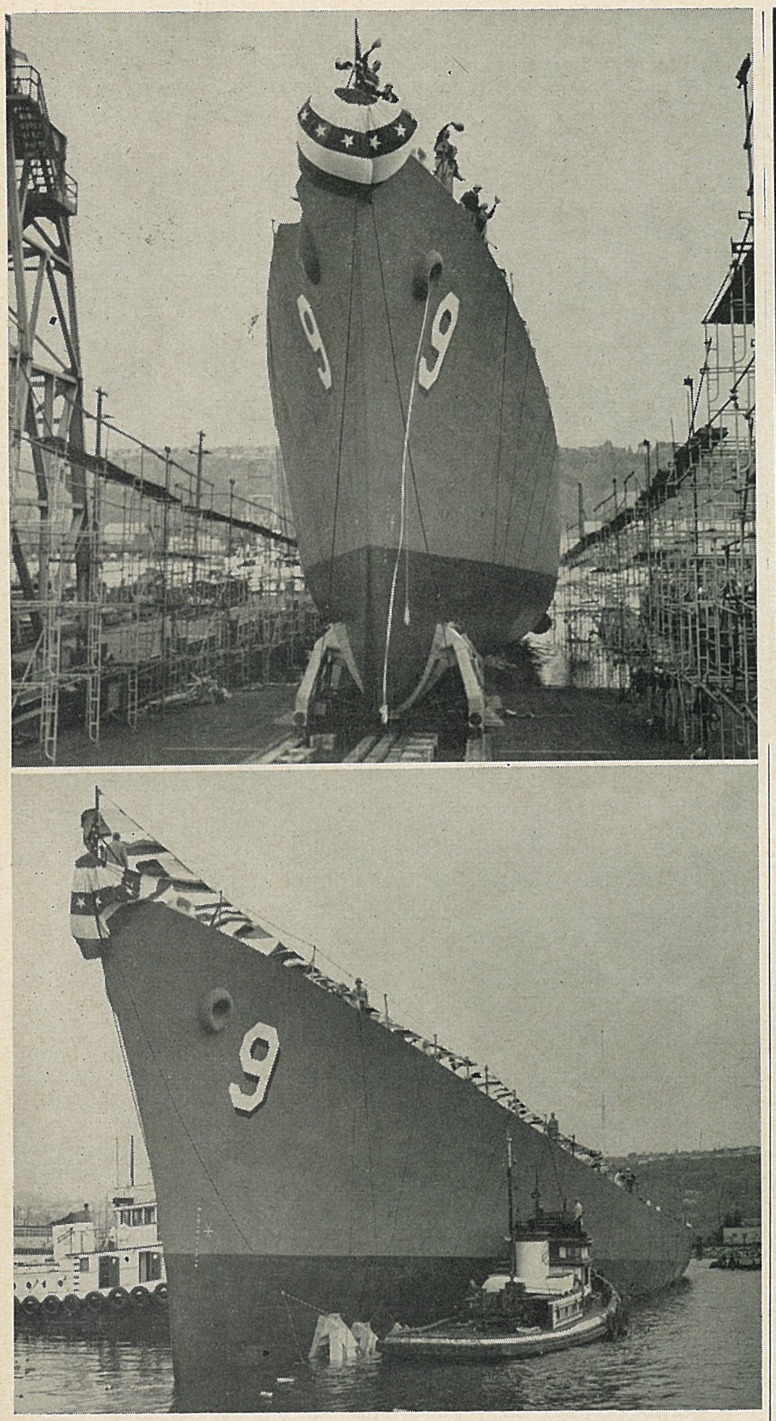
After breakfast, members held a sports car "beauty contest." Winners and cars were: Carpenter, Corvette, first place; Sid Weiner, MGA, second; and R. Cheney, Porsche, third.

Carpenter said the next club event will be a luau on June 27.

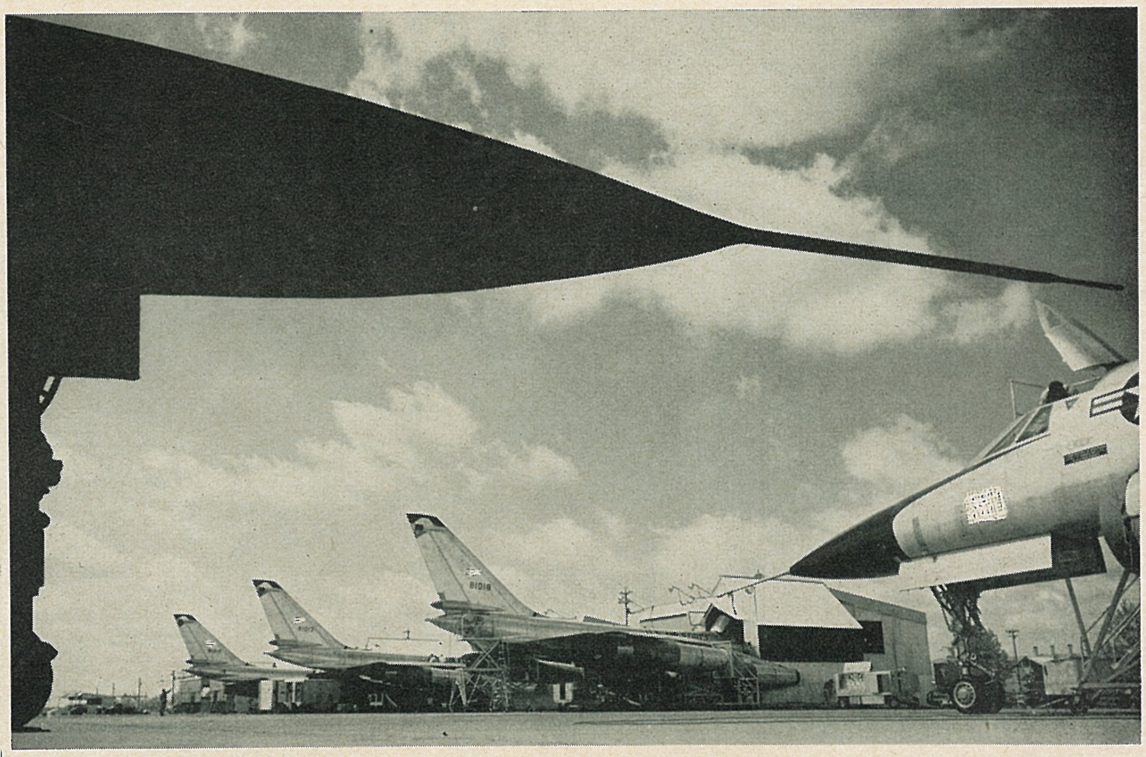
50 Attend Divers' Casa Cove Outing

Fifty persons attended a "get acquainted" outing May 17 at Casa Cove sponsored by the CRA Delta Divers, Tom Richardson, commissioner, reported. It was one of the largest groups ever in attendance at a club activity.

At last night's meeting members chose a nominating committee to select the officer slate for the election to be held next month.



TARTAR SHIP—Launched at Seattle, Wash., last month was the "Towers," destined to be equipped with Tartar missiles, built by Convair at Pomona Division. She is shown going down ways of Todd Shipyards. Another "Charles Adams" class destroyer was launched at about same time at Bay City, Mich. Both are due for late 1960 delivery to Navy.



SPRING SILHOUETTE—Convair Fort Worth photographer Aaron Murray draws on imagination as he captures nest of Hustlers in afternoon sun and then superimposes silhouette in foreground for dramatic effect.

Dynamics Is Considering Joint Chemical Concern

The boards of directors of General Dynamics Corporation and the Philadelphia and Reading Corporation May 11 agreed "in principle" to the organization of a jointly owned corporation for the purpose of producing chemicals from anthracite mining wastes and residues.

The new company would be known as Dynamics Reading Chemicals, Incorporated and would be the only chemical company in the United States producing chemicals from this type of mining waste. Details of the financing of the proposed organization are not yet worked out.

According to Frank Pace Jr., chairman of the board of General Dynamics, and Howard A. Newman, president of Philadelphia and Reading, the possibility of a joint venture has been under intensive consideration by both corporations for many months.

If, following certain explorations, the new corporation is formed, it would produce hydrogen ammonia, ammonia nitrate, urea, nitrogen solutions, methanol, calcium carbide, acetylene and vinyl chloride primarily for bulk sales to the chemical industry and allied industries.

Management and sales responsibility would be under the jurisdiction of Rex L. Nicholson, president of the Liquid Carbonic Division of General Dynamics Corporation.

Facilities of Dynamics Reading Chemicals would be located at Pottsville, Pa., the only area in this country where anthracite mining waste exists in quantity sufficient for an enterprise of this size.

Manufacturing operations would utilize the Lurgi process, successfully employed for a number of years in Germany. This process promises unique achievements in the petrochemical area.



"Here comes 'Old Faithful' again."

Crews Get Awards Of Caps, Lapel Pins For B-58 Excellence

New quality crew awards are being presented monthly at Convair Fort Worth to B-58 flight test field operations crews who are rated "excellent" in maintaining their airplanes.

The recognition awards are flightline caps and lapel pins bearing the new "B-58 Excellence Emblem," according to R. W. McGuffee, manager of development.

"Our purpose is to recognize employees who consistently achieve top quality maintenance and to reduce airplane turnaround time between flights," McGuffee said.

"We feel that this can be done by creating a more tightly knit team effort on each airplane and by promoting friendly competition among crews."

Each month's quality crews are selected by a committee made up of B. A. Erickson, manager of flight; N. B. Robbins, manager of B-58 flight test program; C. C. Flagg, chief of inspection-modernization, and McGuffee.

F-106s Will Get New 'Bobsled' Ejection Device

Convair San Diego has been awarded an Air Force contract for incorporation of a newly-perfected ejection seat in its F-106 all-weather jet interceptors, B. F. Coggan, San Diego Division manager and Convair vice president, announced recently.

The $1,553,449 contract provides for the inclusion of the system, known officially as the "B" Supersonic Seat Escape System, in F-106s now under production at Convair SD's Plant 2.

Convair SD, first aircraft company to make application of the new seat, headed a 27-month industry-wide effort to develop a safe emergency ejection system.

The system embodies four principles never before combined in pilot escape systems: a toboggan-shaped seat; rocket propulsion; twin telescoping booms to stabilize the seat's trajectory; positioning of the pilot on his back in a feet-first attitude before ejection from the aircraft.

The new system jettisons the aircraft canopy and rockets the pilot and his seat out of the aircraft automatically after movement of only one lever by the pilot. The entire action takes only 1.31 seconds.

Air Conditioners Offer B-58 'Constant Climate'

Air conditioning has just begun for 1959 in the Convair Fort Worth plant—but B-58 air conditioners run the year round, as long as any of the aircraft's sub-systems are in operation.

It is imperative that many parts remain at constant temperatures whenever in operation.

To perform this task, mobile 50-ton air conditioners, valued at over $24,000 apiece, are used to keep operative B-58 systems at stable temperatures at all times when systems are being operated on the ground for tests or checkouts.

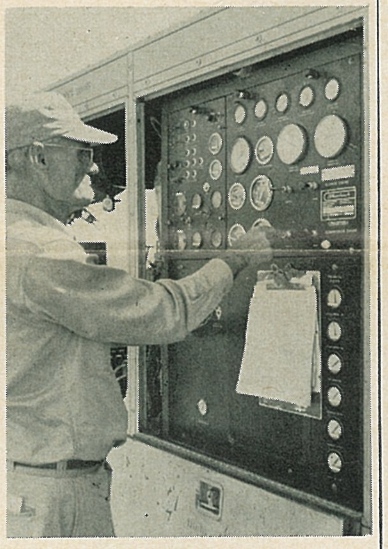
The air conditioners are about the size of a small trailer. They are painted yellow and have a control board type operation panel that requires a qualified operator.

The panel is covered with high and low temperature pressure gauges, supply air flow and pressure meters, etc.

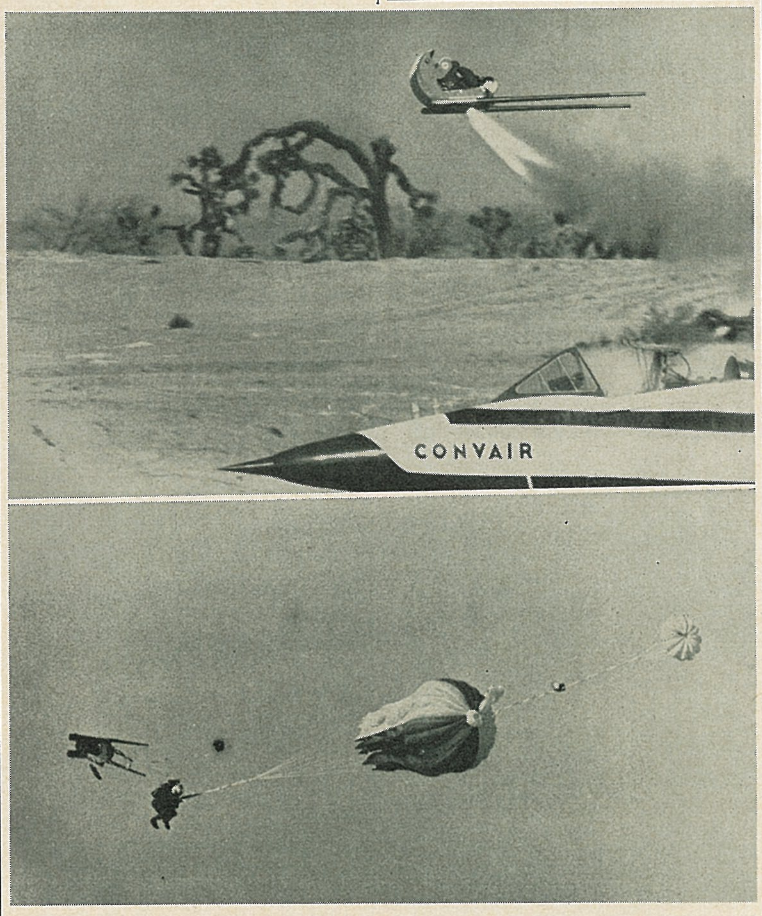
"It's highly important that the ducts carry cool air into the right areas whenever a system is in operation," commented M. R. Jackson, division material handling coordinator.

Jackson said only recently an expensive part was lost because an air conditioning duct was accidentally sealed off.

The conditioners are a vital part of the Hustler's ground support equipment. They are manufactured by the C. A. Hokanson Co., Inc. of Los Angeles.



AT CONTROLS — Convair Fort Worth's T. L. Wood of Dept. 63 makes proper adjustments on gigantic air conditioner's control board to keep cool air flowing.



AERIAL BOBSLED—Newly-perfected ejection seat will be used first in Convair F-106 jet interceptors. Upper shot shows rocket-powered seat carried above and away from cockpit with pilot in supine position. In lower photo, small drag chute (at far right) slows seat before deployment of main chute.

Society Announces Scholarship Fund

A scholarship loan fund for SMU and TCU students was announced this week by the Dallas-Fort Worth section of the American Society of Quality Control.

The fund will be available initially to SMU's industrial engineering department and TCU's school of business for the purpose of providing funds to students in the field of quality control.

Fund chairman is Convair Fort Worth's Glen H. Parmeter.

Convair Son Honored As Top ROTC Cadet

Ernest Miller Jr. (son of Ernest Miller, Convair SD security guard) May 15 received a medal in regimental parade and field day competition at Balboa Stadium as the outstanding first-year cadet in the Hoover High School ROTC.

Plastic Bag Danger To Children Noted

Convair safety departments have joined in the current hue and cry to protect small children from death in plastic bags.

More than 20 youngsters have lost their lives from suffocation after crawling inside plastic containers left within their reach, M. C. Val Dez, SD chief safety engineer, reported.

"Families with small children can guard against possible tragedy by diligently keeping the bags out of reach—or better yet, by not keeping them in or near the house at all," he cautioned.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

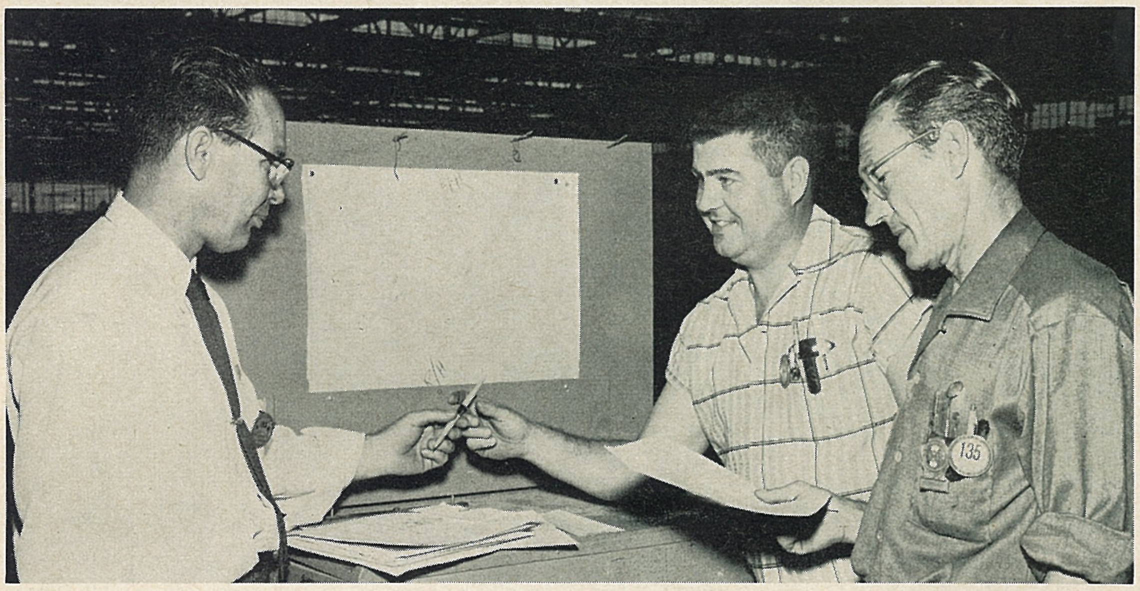
Vol. 12, No. 12 — Wednesday, June 10, 1959

San Diego EDITION

(Serving San Diego Division of Convair)

SD Division news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



SIGNING UP—Dept. 135 at San Diego was among top departments during early days of sign-up for Tri-Hospital drive. In this photo, George W. Smith, IAM committeeman, right, and Ira Quillin, assistant foreman, acting as team, sign Dave Souza on "dotted line." This was general procedure throughout plants, with assistant foremen and shop committeemen acting together.

Vigorous Drive Under Way For Hospital Fund

Strenuous campaigning for the Tri-Hospital Fund drive continued this week at both San Diego and Astronautics Divisions.

Campaign teams, including a union shop committeeman and a member of supervision, are making personal contact with every employee.

Unions which are adding their active support through shop committeemen as well as through membership on the plant-wide campaign committee include the International Association of Machinists, the International Brotherhood of Electrical Workers and the Engineers and Architects Association.

Each individual is being asked to contribute one day's pay a year for three years by payroll deduction. The funds will go to provide vitally needed expansions at Mercy, Scripps and Sharp hospitals.

Late last week the first of the Plant 1 returns had begun to flow into campaign headquarters. Twenty-five per cent of the pledge cards from Plant 1 had been returned. Of these, 82 per cent pledged to support the drive. Of the first 545 cards returned from Plant 2, 533 authorized the gift.

Some statistics, most of these from small departments, were available at **Convairiety** press-time.

Departments leading the way after only two days of card counting were the following: Dept. 14-0 signed up 100 per cent; Dept. 14-6, 84 per cent; Dept. 100, 83 per cent; Dept. 25-7, 75 per cent; Dept. 25-3, 75 per cent; Dept. 25-0, 75 per cent; and Dept. 171, 63 per cent.

In General Office, as of late last week, 52 per cent of the cards had been returned and 76 per cent of these were favorable.

Posters depicting the day by day progress of the drive have been located at both overpasses and Gate Five at Plant 1 and the overpass at Plant 2.

Campaign instruction sheets, brochures and fact sheets have been distributed to campaign workers through the plants who are doing the actual contact work.

Separate organizations have been set up within Plants 1 and 2 and engineering to operate in close cooperation with union representatives.

Citywide efforts are aimed at raising $10½ million for much-needed expansions at Mercy, Sharp and Scripps hospitals to provide rooms for several hundred more beds.

★ ★ ★

Daniel M. Crosno, a security guard at Convair San Diego, does not have to be told of the importance of the Tri-Hospital Fund drive. He's already convinced.

Crosno last week walked into Tri-Hospital Fund headquarters at San Diego and asked that his deduction be increased to $3 per check.

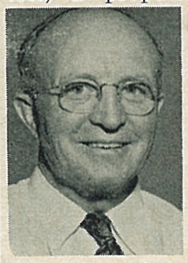
"One dollar for each of the hospitals," is the way he put it.

Committeemen asked Crosno why he was contributing far beyond the required amount.

"Three years ago I took my wife to the hospital and had to wait over seven hours before a bed was available," Crosno said. "I wouldn't want that to happen again."

Don Kennedy's $30,600 Idea Wins Top Prize

Don W. Kennedy, a foreman in Dept. 116, and George E. Trimlett, a propulsion group engineer in Dept. 6, are the winners of the $1,000 and $500 "RX" idea awards for April.



Don Kennedy

Estimated savings to Convair through the two proposals is $160,134. Kennedy and Trimlett, as winners of the "RX" April awards are also eligible for the $2,000 Grand Prize to be given at conclusion of the "RX" program after the July judging.

To win the first of the four $1,000 awards, Kennedy recommended that several potted harness assemblies used on 880 and 600 programs be returned to in-plant manufacture at Convair SD, instead of being given on subcontract basis to vendors. Savings to Convair, estimated through the next 12 months, is $30,678.

Trimlett's "RX" idea, good for the $500 second prize, suggested that the Model 22 test stand engine be returned to vendor for updating to zero time and installed in a production aircraft.



G. E. Trimlett

"Action on this proposal has already been taken," B. F. Coggan, SD Division manager, said. "An Advanced Bill of Material for the extra production engine has been cancelled."

Trimlett's proposal will save the company $129,456. Although his lump sum saving is considerably greater than Kennedy's other factors are also taken into consideration when making the awards, especially long-term savings to Convair.

Coggan reminded that there is still a full month-and-a-half to go in the "RX" drive.

"RX" researchers hope to have results of the May awards ready for publication in the next issue of **Convairiety** (June 24).

'RX'

April $1,500 . . . GONE
May $1,500 . . . GOING
June $1,500 . . . GOING
And still to come:
July $1,500 . . . and
Grand Award $2,000

Bloodmobile Visit Slated For 2nd Shift

Second-shift people at Convair San Diego Plant 2 may be the ones to push SD's credit at the San Diego Blood Bank over to the right side of the ledger again.

Next bloodmobile will be stationed at Plant 2 the evening of June 25, said Ken Wulfemeyer of SD employee services. Volunteers may sign up with their supervisors after June 15.

A good turnout of 104 gave blood May 28 when the bloodmobile solicited blood from Plant 1 second-shifters. However, this will be gone by the end of June, said Wulfemeyer.

ES Award of $5,639 New All-Time Convair Record

Two Convair SD men have received the first payment of the largest Employee Suggestion award ever made at any Convair division.

In fact, they have broken all existing records not once but twice.

E. J. Rasp and J. B. Stevens (both Dept. 280) will receive a total of $5,639.10, an all-time high, for their ES recommending the use of subcontract change letter to advise subcontractors in advance of new tubing and harness changes on the F-106. The suggestion will almost eliminate the fabrication and installation of obsolete tubing and harnesses.

Savings to Convair during the first year the suggestion is in effect will amount to $56,391. Both Rasp and Stevens this month received the first payment, checks for $1,409.80. On Nov. 29 they will each receive $1,409.75 as final payment on the suggestion, assuming savings continue as anticipated.

Actually, because the suggestion award is divided in half between the two men, the ES record is broken twice. The $2,819.55 each man receives is larger than any single other ES ever accepted.

Their suggestion will eliminate time and expense formerly required by subcontractors to install obsolete tubing and harnesses and also Convair time formerly used to remove and replace them.

The delay had been caused by an interim period, varying from 30-45 days, between the time the Aircraft Change Analyses and Engineering Change Proposals were written and papers received by subcontractors. During this time obsolete tubing and harnesses were still made and installed on the ships.

The subcontract change letter, suggested by the two Plant 2 men, will eliminate the time lapse and give the subcontractor sufficient notice on proposed changes.



JACKPOT—E. J. Rasp and J. B. Stevens of Dept. 280 SD hold "subcontract change letter" that helped earn them record Employee Suggestion award. Idea was put into effect some time ago but award was delayed until savings were determined.

Interplant Highway Resurfaced at SD

The road connecting Plants 1 and 2 at Convair San Diego has been reopened for use after being completely resurfaced and regraded by SD plant engineering. Vern Sharp, assistant chief plant engineer, said that the work will make for better drainage and eliminate risk of damage to machinery and equipment moving between the two plants.

Novel Baggage-Loading System Will Feature American's 600s

American Airlines representatives were at Convair San Diego last week for final mockup inspection of American's baggage-loading system to be installed in the Convair 600 jet transport.

All American Airlines' Convair 600s will be equipped with the revolutionary system, with Convair-designed improvements, to speed baggage handling.

Basically, the new method involves the pre-packing of luggage for a given destination in large plastic containers, each holding the equivalent of 25 suitcases. The basket-shaped containers, with contents intact, will be unloaded at different points along the air routes.

"The new system of handling baggage will not only speed the process (no customer will have to wait more than 10 minutes for his luggage)," explained A. J. Savard, project engineer for the 600, "but will allow more careful treatment—eliminating risk of damage to luggage, injury to handlers, and possibility of misdirected articles."

The Convair 600 is capable of

(Continued on Page 2)

Drawing Will Be Held June 19 to Determine Winners of Tickets to Six Padre Games

Ball fans at Convair SD will have a chance at free seats at the Padres home games, June 30 through July 5, courtesy of CRA.

Next drawing for baseball tickets will close next Friday (June 19) at 4 p.m.

Winners will each receive two tickets to one of the games to be played June 30, July 1, 2, and 3 with Phoenix and July 4-5 with Salt Lake City.

To be eligible for the drawing, slips bearing the name, department number, clock number, plant location and extension number should be deposited in one of the boxes before the deadline time. Only one entry per person.

Boxes are located in employee services, Plant 1 and Plant 2; at Rose Canyon, in the office of Dorothy Kniffen, Bldg. 2, ext. 2239; at Fordham St., office of Bessie Cooper, ext. 100; gun butts, at field operations inspection office; ramp, thermodynamics laboratory.

Lindbergh Field Clean as a Pin To Prevent 880 Engine Damage

Convair San Diego's newly-acquired giant vacuum sweeper is now keeping the Lindbergh Field runways clean as a whistle for the Convair planes.

The runway sweeper, purchased from Wayne Co. of Pomona at an approximate cost of $25,000, is being used primarily during the tests of the Convair 880 to eliminate possibility of engine damage.

Because of the low intake ducts on the 880, the risk of debris being drawn into the engine is greater than with other Convair-built planes. Especially during the reverse thrust tests, the hazard is greatly lessened with the runways cleaned of all bolts, nuts, pebbles, grass, and other debris.

Several hundred pounds of debris were accumulated on the first sweeping with subsequent cleanings gathering considerably less. According to B. R. Hisaw, chief of transportation operations who has responsibility for the huge housecleaning job, the runways will be inspected frequently and a regular cleaning schedule set up.

It takes the sweeper about four hours to clean a runway with the big tank truck traveling about 20 miles an hour.

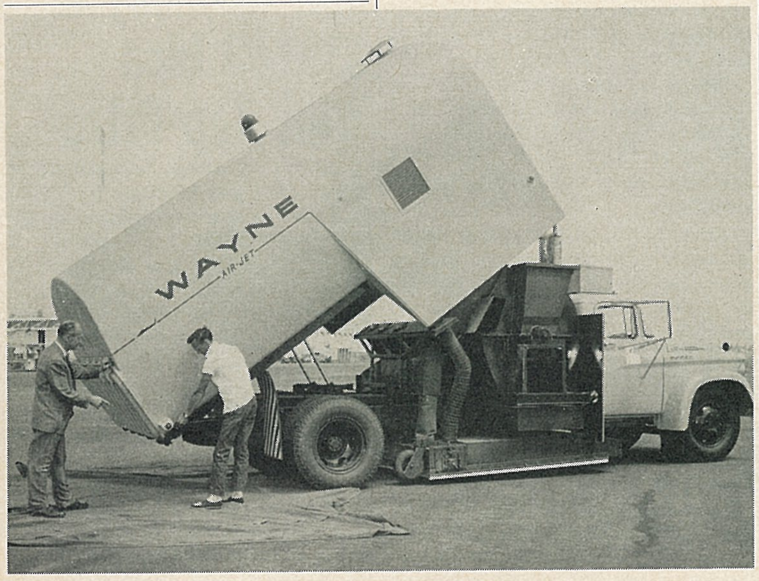
Fort Worth Division has been using a similar vacuum sweeper since 1957 to keep runways clean for B-58s.

Convair to Observe July 3 as Holiday

Inasmuch as July 4 falls on a Saturday this year, the preceding day, Friday, July 3, will be observed as a holiday at all Convair divisions and facilities.

CERTIFICATE WON

John J. Jackson (Convair SD Dept. 3-8) recently received a Certificate in Industrial Relations from San Diego State College upon successful completion of course requirements.



GIANT SWEEPER—W. E. Burnett, SD transportation operations foreman, watches Dudley Swindall, Dept. 21 driver, start tank of Convair SD's newly-acquired vacuum sweeper into dump position after cleaning air field runways.

MANAGEMENT CLUB WILL MEET JUNE 17, CARIBBEAN ROOM

Annual installation of new Management Club officers at Convair SD will take place at the June 17 meeting in the Caribbean Room of the El Cortez Hotel.

Principal speaker at the meeting will be Col. George W. Kinney, assistant chief, investigation and field operations division, Directorate of Flight Safety Research, Office of Inspector General, Norton AFB, Calif. He will be accompanied by Col. C. J. "Corky" Cochrane, the acting director of flight safety research at Norton AFB.

Tickets for the meeting, which will also include presentation of the Mug of Month and MacSave-it award, are now on sale from the usual department outlets.

Sponsoring departments, contracts, customer service, and military relations, advise members that free parking will be available, upon presentation of dinner tickets, in the hotel travelator parking lot, which can be entered from either Sixth or Seventh Sts.

A raffle will also be sponsored by the club at the meeting which starts with social hour at 5:30.

CRA operates for YOUR pleasure. Consult the CRA calendar for schedules of your favorite activities.

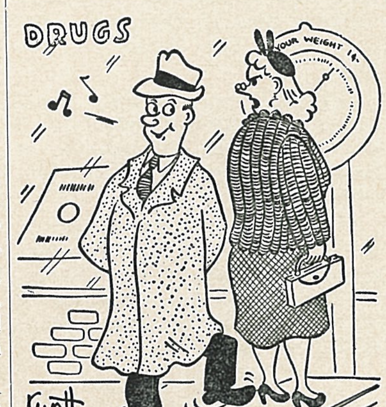
McClure Re-elected National QC Veep

J. Y. McClure of Convair Fort Worth has been re-elected vice president of the American Society for Quality Control at the society's annual meeting in Cleveland.

From 1956 to 1958 he was treasurer of the organization and has been a director and executive director of the society.

DEPT. 192 COUPLE MARRY AT VEGAS

Blanche (Bing) McDonald and Robert A. Gadow, both Dept. 192 SD, were married May 22 in Las Vegas. They will soon be moving into their new home which is just being completed.



"Can't you ever forget that you're a butcher?"

★ Convairiety ★

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Approximate current total circulation, over 65,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



RACKED UP—Graphic portrayal of old and new way of both storing and handling sheet and plate stock at Convair SD's Rose Canyon material handling facility is shown here. Upper left shows old method of handling stock that required crane. Now (upper right) side-loading lift truck skims down aisle and picks up stock. Bottom left and right show systematic groupings accomplished with new racks as opposed to old "pile" arrangement. System has been used at Fort Worth for some time.

Better Material Handling System Put Into Operation at SD Division

A huge new "library" is being used at Convair SD's Rose Canyon material handling and storage facility. The "books" are the same, but the "shelves" are all new.

The "books," which in this case are skid loads of sheet stock, have been placed on racks—26,240 square feet of them. Compared to the old method, it's almost as easy as picking a book off a library shelf to get the needed piece of sheet stock.

"Material is now available a skid at a time, eliminating the former method of digging through stacks and rotating material until the wanted skid was uncovered," B. J. Handwerker, material handling engineer of SD industrial engineering, said.

Side-loading fork lift trucks now scoot up the aisles and pick off the skid which is available on its own shelf.

"In addition to making the sheet and plate stock easy to get at, the new system will reduce handling and storage damage, issue time, and free an overhead crane (formerly used) for other purposes," Handwerker explained.

Previously, sheet and plate stock in the Rose Canyon Warehouse had occupied 24,578 square feet. Another 4,000 square feet between columns was useless because it couldn't be serviced by the overhead crane, plus 7,900 square feet of space that had been occupied by castings and forgings, for a total of 36,478 square feet.

Now, using the racks, only 26,240 square feet are needed, a saving of slightly more than 10,000 square feet. This space was badly needed for expansion of raw material storage and enlargement of the receiving inspection area.

Handwerker said "this new facility is just another step in a broad new concept of material handling which will streamline storage and production at Convair San Diego."

S. L. Smith, foreman of raw material handling stores at Rose Canyon, said the installation is the only one of its kind on the West Coast. However, Convair Fort Worth has had a similar type of operation in use for some time.

Each of the new rack sections has a capacity of 40,000 lbs. The shelves are adjustable and can handle sheet stock up to 6,000 lbs. On top is a mezzanine deck, connected by catwalks, for additional storage. A central stairway provides access to the upper storage areas.

Located adjacent to the receiving department, the racks were installed by the Rack Engineering Co. of Calif.

Reliability Lecture Series Nearing End

Dr. Edward P. Coleman, engineering professor at UCLA, will make the last in a series of lectures at Convair SD today (June 10) in the Bldg. 14 auditorium.

Top engineering management, members and alternates of the reliability planning and reliability working committees have attended the reliability sessions arranged by Dr. A. M. Small of reliability, human factors, and acoustics, and H. W. Rubottom's educational services section.

Dr. Coleman's lectures included discussion of scope, value and techniques for reliability and reliability design.

Nelson Fuller Named Rotary Council Head

Nelson Fuller, Convair general office public relations department staff member, has been elected president of the San Diego County Council of Rotary Clubs, effective July 1. He retires as president of the Pacific Beach Rotary Club June 30. The Council membership comprises 22 Rotary clubs in San Diego County.

FRANK APPLEGATE ON SUBCOMMITTEE

Frank D. Applegate, senior project engineer for the Model 8 program at Convair SD, has been appointed chairman of a Society of Automotive Engineers subcommittee that is delving into "the right approach to reliability."

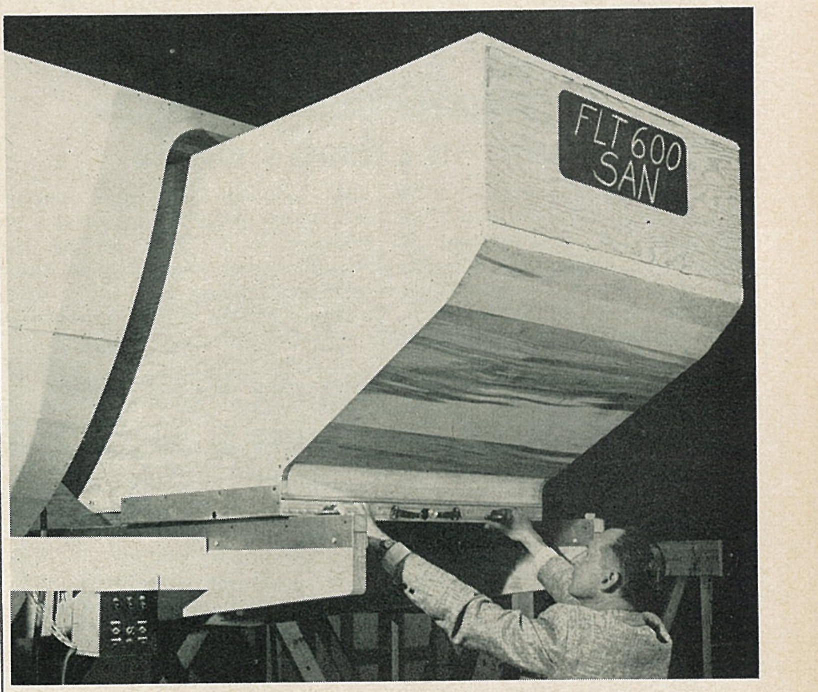
Novel Baggage-Loading System Will Feature American's 600s

(Continued from Page 1)
holding nine of the large containers, six in the forward cargo compartment and three in the aft cargo compartment.

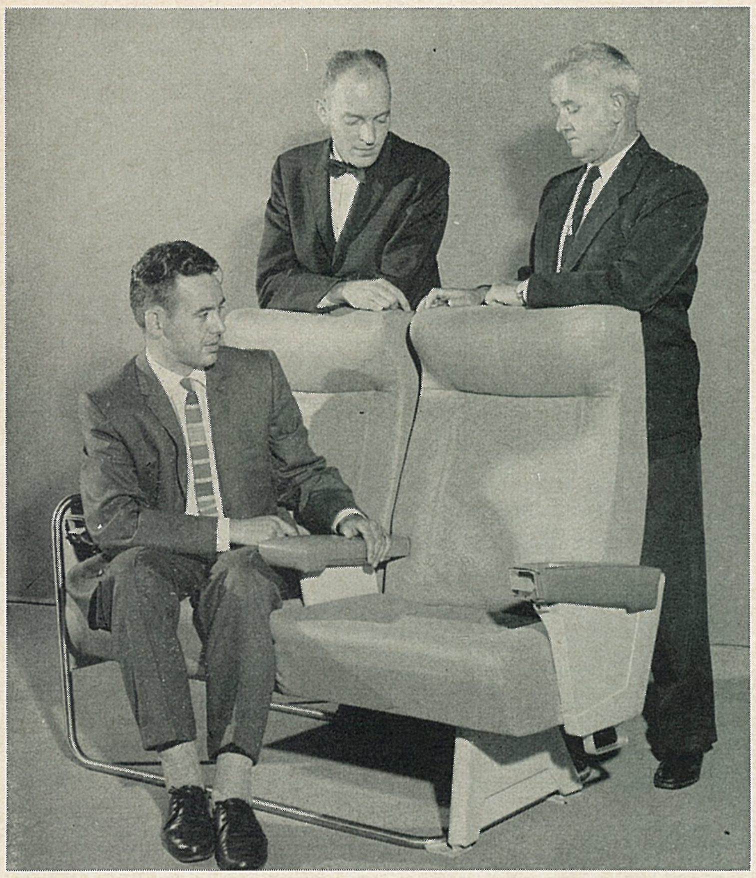
The containers can be loaded either automatically or manually and positioned in the cargo hold by the plane's conveyor system. They can be shuttled in either direction by push-button control. An automatic switch on the loader is sequenced so that the containers can move only into clear spaces in either direction.

Convair SD mechanisms section of engineering has worked out refinements to the loading system. Tracks and mechanism of the Convair conveyor system will be installed flush with the cargo deck, allowing easier handling within the plane.

Each container is 86 inches in length, 40 in. wide, and 39 in. deep, with a capacity of 56 cubic feet. Each one weighs 140 lbs. unloaded—1,000 lbs. loaded.



TIDY BAGGAGE—Glen McPherren of Convair SD mechanisms demonstrates way baggage containers will go into American Airlines Convair 600 cargo holds. Large plastic containers, pre-packed, will be unloaded at labeled destinations unopened.



DESIGNERS—Experts working on interior design of Convair's jet transports, from left, Charles Willits (seated), James Stansfield, and Cliff Dietz of Convair SD furnishings, examine upholstery chosen by one 880 transport customer.

Ex-Auto Designers Join In Creating Jet Interior

A group of industrial designers transplanted from the automotive industry in the Midwest have added their talents and know-how on interior appointments to those of other Convair designers to create jet transport interiors.

Approximately 35 years' experience in automotive styling and industrial design were piled up by four men before they came to Convair San Diego as a part of the furnishings section of engineering.

Coming from Chrysler was James Stansfield; Dave Maslan from General Motors; Joe McMahon, from Ford Motors Co.; and Ralph Meyers, from Studebaker.

They joined a design group headed by Cliff Dietz who came to San Diego in 1947 as a styling follow-up man. Others now working on interiors for the 880, 600, and intercontinental 880 jet transports are Charles Willits, Bruce Swinford, Will Warriner, Harry Malcolm, and Claire Lynch.

All of the group have either an industrial design, art, or architectural background.

The main difference between interior appointments for automobiles and aircraft is the difference between assembly line, quantity work and custom-made jobs, explained Stansfield. In the automotive industry there is little variance in the interior styling of the different cars and the materials can be purchased in quantity lots, while in the aircraft industry each customer has the privilege of choosing his own appearance design, colors, and fabrics.

For instance, the different airlines have different needs which affect the interior design of the planes. Those lines which will use the transports for short hops only need a buffet equipped to handle pre-cooked food, while planes designed for long trips will need buffets outfitted for cooking on the plane. Various types of seats are being specified, such as the "siesta" seat, a large reclining type—all making a great variance in the interior styling.

Each customer is allowed to choose its own color scheme, fabrics, and general decor.

Weight, availability over a span of time for replacement, fire resistance, and durability must all be considered in the choice of materials. Upholstery and carpet fabrics must be custom woven for color and weave.

Special processes have been worked out by the interior design group to provide a particular type of decoration such as the mural scenes which will highlight the vertical partitions in the lounge and cabin of TWA 880s. The art work was executed by Warriner and reproduced in silk screen on the back of a sheet of vinyl which in turn was laminated over a vinyl backing with a sheet of fabric as center layer.

The industrial designers meet a variety of engineering problems — plumbing, sliding pods, movable coat closets used as dividers—all unique to the aircraft business and which, at least up to now, have not entered the field of automobile design.

Dr. Bond Addresses NATO Advice Group

Dr. John Bond Jr., Convair SD chief of physics, is in Paris this week to address the NATO advisory group for aeronautical research and development.

'Convair, California' Card Reaches MSTS

The mail goes through, even when the address is vague and incomplete.

A card, addressed "Convair Aircraft Corp., Missile Division, General Delivery, Calif., reached the MSTS facility just four days after it was mailed from West Lebanon, Ind. It was written by a Boy Scout, Bob Powell, requesting pictures of the Atlas missile.

Restored B-24 Takes Its Place In AF Museum

A B-24, restored to wartime spit and polish, flew to Wright-Patterson AFB at Dayton last month to enter the Air Force Museum.

Its arrival was a high point of Armed Forces Day observance before a crowd of 62,000 May 17.

A. C. Snyder and C. K. Kurtz, Convair SD field service engineers at Dayton, reported:

"The airplane really created quite a sensation and there was a terrific surge of the crowd to the fence as the airplane taxied to the park . . . It was a real thrill to see the old B-24 . . . It had four of the sweetest, smoothest running engines you ever heard and it was rather sad to hear them shut down and watch the big 'fans' come to rest for the last time."

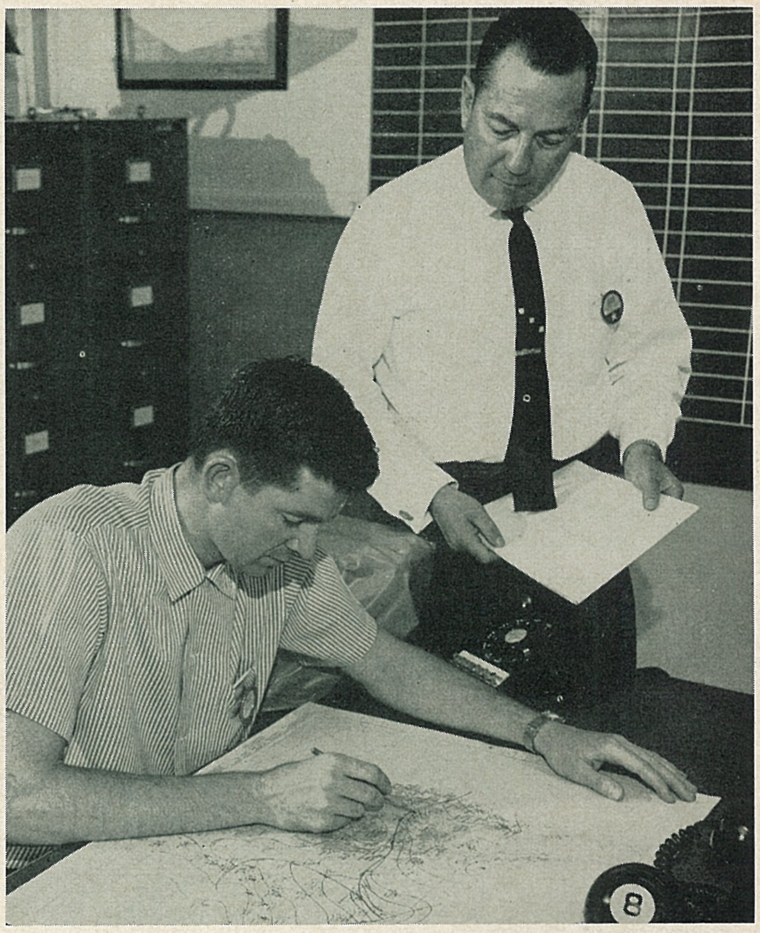
Although billed as the "last flying B-24," actually there are quite a number of the Convair-built wartime bombers flying in various parts of the globe, though virtually all have been modified for cargo or executive purposes.

A Dayton Daily News columnist, James E. Fain, was responsible for adding a nostalgic twist to the affair. In a somewhat uncomplimentary column commenting on the "last of the B-24s" he wrote: "The Liberator was anything but an affectionate airplane . . . There weren't many things you actually could blame on the Baker-Two-Four, if you wanted to be fair . . . It was just unsympathetic . . . the kind of mechanism that would go on forever, unending and unyielding . . . Like the dinosaur, the B-24 never was much of a pet, anyhow."

In response, James R. Longenecker, captain, USAFR, wrote the editor:

"In flying 26 combat missions with the Eighth Air Force, I personally developed a great love and affection for (the B-24). Granted that it did not have the stability of the B-17, yet the airfoil which it had for wings was aerodynamically superior to anything of its time. I personally do not recall any serious gripes about the handling of this airplane . . . I mourn its passing very much and would give anything for just one more ride . . . May its soul rest in peace."

Captain Longenecker's letter was read with interest by Maj. Robert L. Bryant, AF museum director, who was instrumental in recalling the captain to active duty, long enough to grant his wish for "one more ride."



PREDICTING—Tom Johnson and Paul LaFrenier of Convair Palmdale are continually "behind the 8-ball" at weather bureau that predicts weather for F-102s and F-106s prior to cross-country flights.

Palmdale Weathermen Outguess Desert Winds

In Antelope Valley, where sudden desert winds can play havoc with aircraft on the ground and in the air, weather forecasting is important business.

So Convair Palmdale's flight department maintains its own weather bureau manned by departmental assistants Tom Johnson and Paul LaFrenier.

Surface weather information reported from nearly 300 stations throughout the United States is transmitted via teletype to the Palmdale facility once each hour. From this information Johnson makes a daily analysis.

Of primary concern at Palmdale are conditions between Palmdale and Kansas City, and Palmdale and Spokane, routes followed on ferry flights of F-102s and F-106s to Richards-Gebaur and Geiger Air Force Bases. Before these jets can take off visibility must be five miles or better and ceiling must be 5,000 feet or better along the flight route. Johnson and LaFrenier give all pilots a weather briefing before take-off.

Similar service is provided for the many other out-bound and in-bound flights from the Convair Palmdale facility, a station which rates in flight activity with major airline stations.

A major accomplishment of Johnson was his formulation of a new system of forecasting Antelope Valley winds, a system so reliable that it has been adopted at nearby Edwards Air Force Base. Using an elaborate algebraic formula involving temperatures, surface pressures and other data, Johnson devised an accurate way of forecasting maximum wind expected for the next six-hour period.

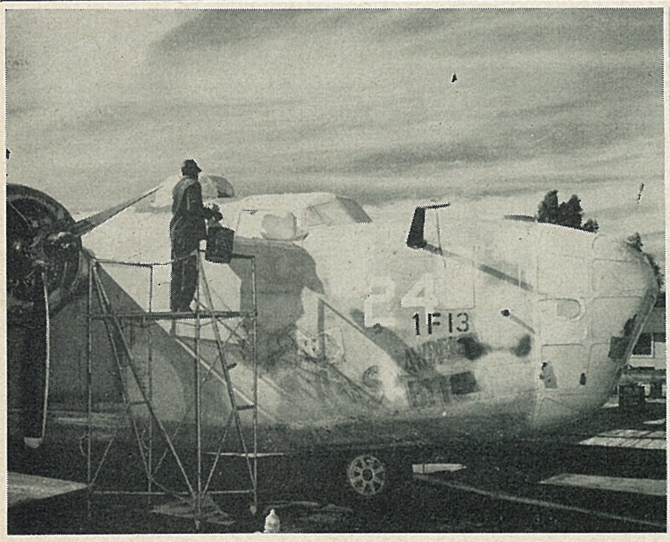
This information is vitally important because it gives advance warning and enables crews to secure all ground aircraft and to cancel scheduled flights to avoid possible damage. It is significant that Convair has never experienced any loss at the Palmdale facility due to surprise winds.

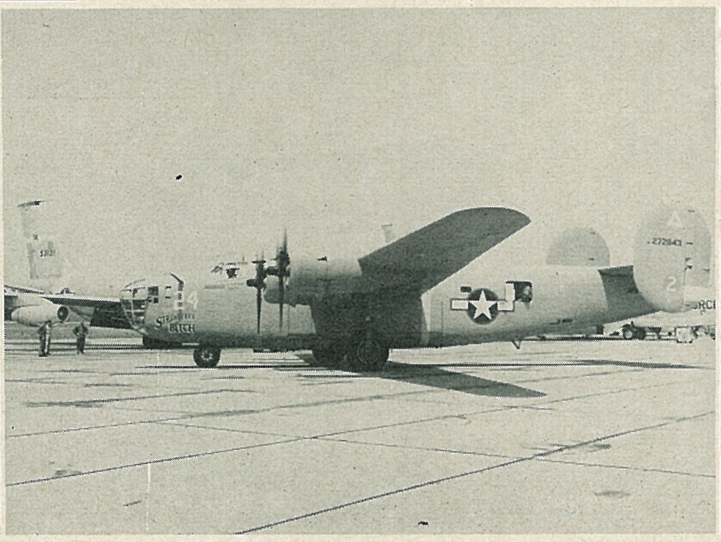
Palmdale's flight department is manned at all times that flights are in operation by either Johnson or LaFrenier. Johnson joined Convair in January of 1956 in his present post. Prior to that he was chief flight superintendent at Los Angeles Airways, where he gained much of his weather experience.

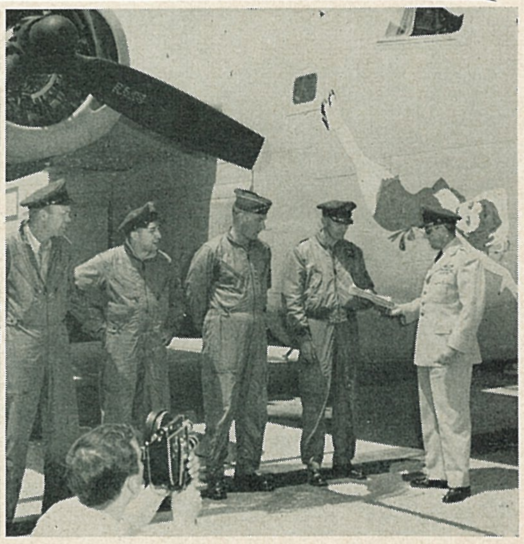
LaFrenier joined Convair in November of 1950 in the San Diego production flight department where he planned overseas deliveries of 240s and 340s. He came to Palmdale in November of 1955 when Rex Warden took over as chief pilot, the position now held by R. E. Myrann.

LaFrenier has a wealth of fascinating background experience ranging from deep sea fishing to both military and civilian air service. One of his most interesting wartime stints was as a member of the 10 hand-picked crews on "Project 7-A." Their assignment was to bridge the Burma Road by air in support of Chiang Kai-shek and Chennault. Using Convair-built C-87 cargo transports, they flew night and day through monsoons and all types of weather to deliver gasoline and ammunition.

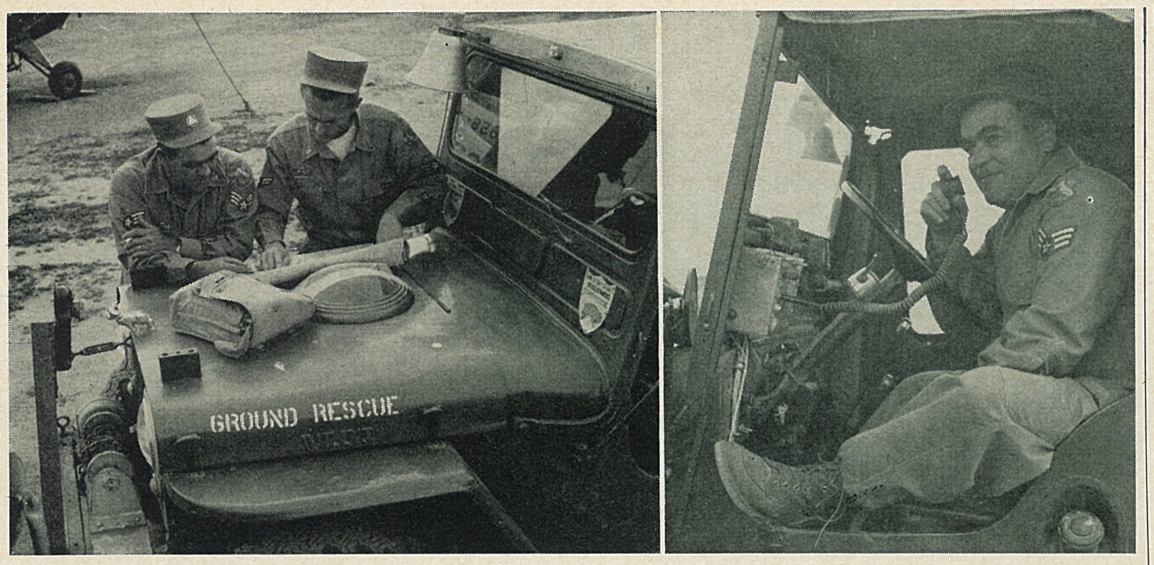
LaFrenier is presently active with AV Soaring Association, serving as director and helping to provide air education for Antelope Valley youth.







"LAST OF LIBERATORS"—B-24, restored at Davis-Monthan AFB, Ariz., last fall, was flown to Wright-Patterson AFB at Dayton last month to enter Air Force Museum there. Arrival was part of Armed Forces Day show. At left above it is shown before restoration. Center is arrival at Dayton. At right is delivery ceremony, from left: T/Sgt. Albert Jones, AF Reserve Capt. J. R. Longenecker, Maj. Max Hadley, Col. A. J. Shower, Maj. Robert L. Bryant, museum director.



RESCUE WORK—Art Thomas (Convair SD Dept. 25) tests two way radio in jeep (at right) and discusses search area with executive officer Darrell McMaster on left. Thomas is commander of ground rescue unit of San Diego Civil Air Patrol, a group which has played prominent role in rescue of downed aviators and lost persons in mountainous area bordering San Diego county.

Seeking a 'Strike'

It's Rough and Tough Traveling, But Ground Searchers Like It!

Treacherous mountains in rattlesnake country, often through mud and dense underbrush, are all in the day's—or night's—work for a small band of San Diego men who gladly face the dangers to save a life.

Led by Art Thomas (Dept. 25 Convair SD), commander, they are members of El Cajon Valley Squadron No. 97, the ground rescue unit of the San Diego Civil Air Patrol.

As such, they form one of the largest units of its kind in the country. Present membership numbers 15, each of whom takes a tough training course that includes advanced first aid, mountain climbing, investigation tactics, search procedure, and monthly familiarization problems in little-known areas in San Diego and outlying countries.

Officially formed as a squadron about one year ago, they have in the past eight months played prominent roles in the search for four downed flyers and a lost child. The most recent was helping in the rescue of an Astronautics man and his wife after their plane crashed a few weeks ago in the Santa Rosa Mountains.

All the men serve voluntarily and are members of the San Diego Ridgerunners, parent organization of the Convair SD CRA Jeep Club. They are on call at all times in an emergency, Thomas said, and have never dropped below 85 per cent participation when called into action.

When first word of an emergency reaches a member, chain telephone reaction quickly follows and the group assembles at their headquarters at Gillespie Field. Awaiting them there are 12 jeeps, fully-packed for a three day expedition into the mountains. All are equipped with first-aid equipment, two-way radios, stretchers, blankets, etc.

A briefing session follows and in the case of a downed flyer the squadron starts at the last known point where the flyer was seen or if this information is not available, the presumed direction.

When the probable location is reached, the jeeps fan out and a fixed pattern of questions is asked of anyone that might possibly have seen or heard the plane.

When a "strike" is made, jeeps are driven as far as possible into the mountains or canyons, then members continue on foot. Thomas coordinates the operation by radio from the Gillespie Field headquarters. He also keeps in touch with planes and eventually personally joins the search.

"Many times we have yelled all night until our voices became whispers, swung spotlights back and forth, cut paths with bolo knives through dense underbrush, teetered in the black of night on a mountain side or hung from ropes extended into space over the side of a cliff," Thomas said.

"We never give up the search until the person is found or presumed dead."

Members are not paid for their services, in fact they buy and maintain the jeeps together with all the equipment. On occasion they may also lose a day's pay at their regular jobs.

"The feeling that you have helped somebody is our only compensation," Thomas asserts.

"Our ambition is to make the organization a complete rescue operation. To do it we need flyers and aircraft. Openings are also available as observers on the jeeps. But we are not kidding anyone, it's a tough job."

SD Auto Engineers To Visit Shipyard

The San Diego Section of the Society of Automotive Engineers will hold its June 15 meeting in conjunction with a tour of the National Steel Shipyard. The meeting will start at 5 p.m.

S.A.E. plant representatives, George Lemke, ext. 1605, and Clarence Gerber, ext. 2981, can provide additional information.



"If I wuz you, I wouldn't loan my end wrench to Bonelli any more . . . He makes such a fuss about having to return it!"

Wed 60 Years, FW Man Is 80

Convair Fort Worth's 80-year-old Dan Longley and his wife, Minnie, celebrated their diamond wedding anniversary recently after 60 years of married life.

"Just stay with it," the Dept. 81 veteran advised when asked the secret of the Longleys' "togetherness."

Longley, four years older than his wife, married in 1899.

The son of an oil man, Longley worked some 40 years in the drilling business before leaving Ohio for Texas in 1924. Mrs. Longley is a native Pennsylvanian.

When he came to Convair 16 years ago, he weighed about 150 pounds. Now he tips the scales at 106 but isn't complaining.



ANNIVERSARY—Convair Fort Worth's Dan Longley, 80, left, of Dept. 81 shows assistant foreman C. A. Little picture of his wife. They have been wed 60 years.

"I'm not much of a meat eater any more—just like the vegetables," he added.

A heavy smoker, Longley started on cigarettes and chewing tobacco at the age of 7. He said he couldn't remember being without one or the other but advised that "it'll kill you if you keep at it, you know."

When he's not taking care of his 15 great grandchildren, he's usually working in his carpenter shop where he specializes in cabinets.

VETERAN OF B-36s WINS 2,500-HR. PIN

Capt. James N. McDaniel at Malmstrom AF Base in Montana last week was awarded a 2,500-hour pin to recognize his hours of flight in B-36s. He previously had received a 1,000-hour pin.

"I felt at the time that the B-36 was just about the ultimate in a long range bombing platform. As a member of Maj. Thad Neal's crew, I flew farther and higher and longer than I had ever flown before—and on one flight had to shave three times before we landed! This was all without refueling, too."

Formula K Craze Hits Texas Where It's Called Go-Karting

Go-Kart champ Dennis Cannon of Convair Fort Worth's Dept. 15-3 says there's just 42,410 pounds difference between the weight of his 90-pound go-kart and the red fire truck he drives at the plant.

Cannon, recently proclaimed indoor go-kart champion of Texas with his 13.9 record set at Will Rogers Coliseum, has done pretty well for himself since he started go-kart racing only in February. (The tiny machines are known elsewhere as Formula K.)

"I've always been interested in racing," he said. "I competed in the Mexican Road Races in 1953-54."

The Convair fireman built his own one-cylinder, two-cycle engine go-kart. He says maximum speed is approximately 40 mph and that he gets about 48 miles to the gallon with the mixture of oil and white gasoline.

Cannon says the tiny cars can be built for $200 and up and that they're available on the retail market, too.

Joe Turner of Dept. 5-4 is another of Convair Fort Worth's go-kart racing enthusiasts. His car is a Spyder 500 model.

Both Cannon and Turner spend almost all of their Sunday afternoons at Mangham Airport where go-kart racing starts around 2 p.m. Both of their wives are qualified racers, too!



CHAMP GO-KARTER—New indoor "go-kart" champ of Texas is Dennis Cannon, left, of Convair Fort Worth's Dept. 15-3, shown here with Dept. 5-4's Joe Turner.

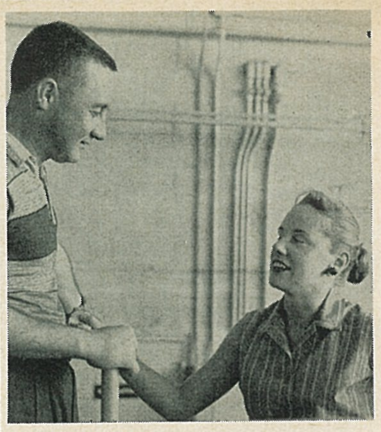
Years of Night School Pay Off as SD Man Passes Bar While Another Receives Degree

Two Convair SD men are seeing their labors recognized now after a total of nine years of night school study in two San Diego colleges.

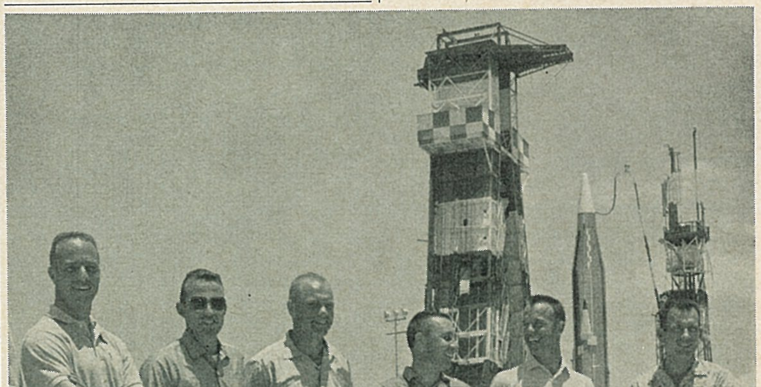
Grueling though it was, both agree it was worth it.

Timothy G. Evatt, a contract representative at Rose Canyon, was notified May 25 that he had passed the state bar examination. The notification climaxed four years of night law school at the University of San Diego, where Evatt was graduated in 1958. He received his B.A. degree from St. Michael's College in Winooski Park, Vt., in 1949.

Five years of night school at San Diego Junior College paid off for T. K. Fisher (Dept. 600) this month when he was graduated from the school with an Associate of Arts degree. Fisher is one of the first to receive this degree, which has only recently been offered by the college. It is equivalent to 60 units or two full years of college.



REUNION — Mercury Astronaut Capt. Virgil Grissom found schoolmate when he visited AFMTC. He and Nancy Hamilton knew each other in Mitchell, Ind.



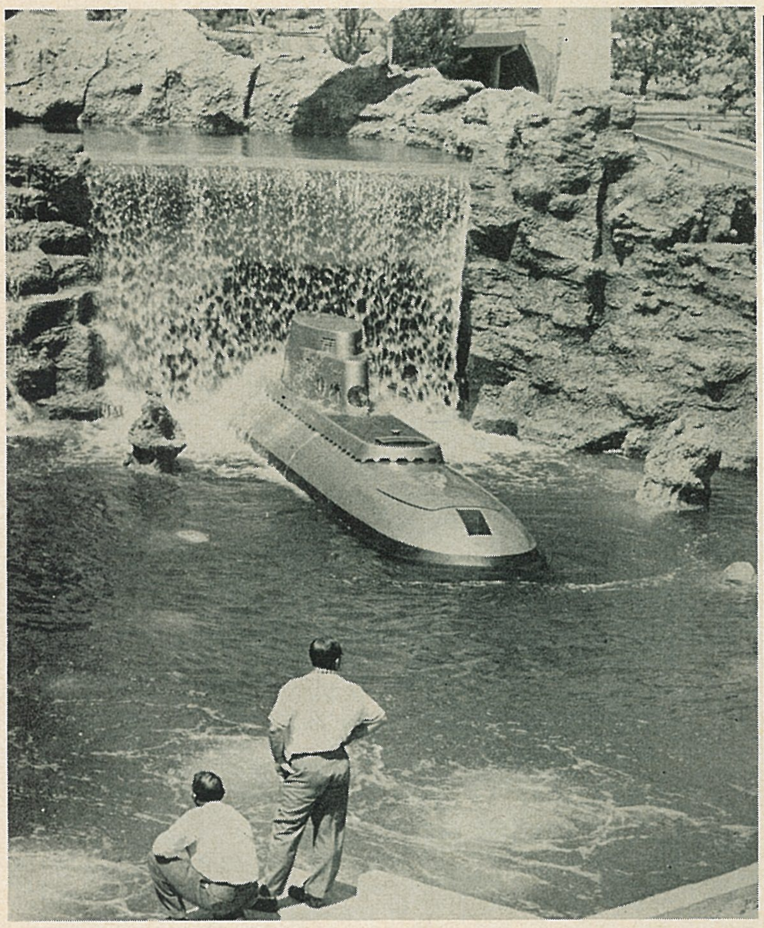
SIGHTSEEING—Mercury Astronauts, one of whom will be first man in space for free world, were recent visitors to Astronautics operations at AFMTC, Florida. In background is Atlas missile, destined to play important part in their venture into space.

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.

★ ★ ★



DISNEYLAND SUB—Submarines (sponsored by General Dynamics Corporation) slated for Disneyland "ocean" at Anaheim, Calif., are undergoing "builders trials" and "shakedowns."

SSB (N) Washington Expected To Become Fleet Workhorse

GROTON — The nation's first "fleet ballistic missile" submarine, the George Washington, was launched here yesterday at Electric Boat.

Designated SSB(N)—the B stands for ballistic missile firing and the N for nuclear powered—the Washington will be capable of firing the 1,500-mile Polaris missile from either surface or submerged positions.

The Washington is expected to become a "fleet workhorse," constantly on station, and as such will have two crews. They will alternate between duty at sea and shore training.

The new submarine will be capable of staying at sea for long periods of time and will be able to manufacture its own oxygen supply for lengthy underwater cruises. The machine employs the principle of electrolysis—electric current running through a cell—to tear each oxygen atom from the two atoms of hydrogen in every molecule of water.

The sub's generator will turn out enough to add 50 per cent more oxygen to the supply subs carry in storage bottles. Therefore the record 60-day submergence, completely independent of the atmosphere, which the atomic sub Seawolf set last year, could be surpassed with ease by the Washington.

The newly appointed Secretary of the Navy, William B. Franke, and Chief of Naval Operations Arleigh A. Burke attended the launching of the George Washington.

Principal speaker at the historic launching was Assistant Secretary of Defense and Comptroller Wilfred J. McNeil.



IN THE WATER—New atom-powered submarine George Washington is readied here for launching which took place yesterday at Groton, Conn.

Electric Boat Man Cited by U.S. Navy

GROTON—Eugene P. Pallange of Electric Boat Division has received a letter of commendation from the Navy for his "invaluable services to the Fleet Ballistic Missile Polaris program."

RAdm. William F. Raborn, Navy Special Projects Director, cited Pallange for his outstanding performance while serving as liaison between the Groton shipyard where the first FBM subs are being built and the Washington office of Special Projects. Raborn credited Pallange with anticipating areas of design and engineering difficulty and working out solutions before they became problems.

CHARACTRON Console To Control Traffic

SAN DIEGO—Delivery of the first S-C 1030 "CHARACTRON Pictorial Conflict Display Console" to General Precision Laboratory, Inc., has been announced by Stromberg-Carlson.

Seven S-C 1030 Display Consoles will be installed in an experimental semi-automatic data processing system for air traffic control now being established by the Federal Aviation Agency.

South America Lines Consider 540 Transports

MONTREAL — Marked enthusiasm met the Canadair-Convair 540 in the first weeks of its demonstration tour of South America. Countries visited were Peru, Chile, Argentina, Brazil and Venezuela. Airlines showing distinct interest in the airplane include Avianca, Aerolineas Argentinas, REAL and Panair do Brasil.

Airline and military pilots, particularly those familiar with the Convair 240, 340 and 440, were unanimous in commending the 540 for its outstanding climb performance, high cruise speed and easy handling when flying on one engine.

* * *

MONTREAL—Pacific Western Airlines, third largest carrier in Canada, has been taking a long hard look at the Canadair-Convair 540 demonstrator airplane now nearing the end of its North American tour.

Numerous evaluation flights and route trials have been made from the PWA base at Edmonton to Fort McMurray, Fort Smith, Yellowknife, Fort Resolution, Embarass and Peace River and from the Vancouver PWA base to Victoria, Comox, Port Hardy and Prince George.

The airline operates scheduled and non-scheduled services throughout British Colombia, Alberta, the Yukon, the Northwest Territories and Alaska. It is also a prime contractor for the air lift to defense installations in the far north of Canada.

Stromberg-Carlson Gets Nuclear Work

ROCHESTER—A contract to build the nuclear instrumentation and safety systems and intercommunication equipment for the U. S. Army's first skid-mounted nuclear power reactor has been awarded to Stromberg-Carlson.

The reactor will be constructed by Alco Products, Inc., of Schenectady, under contract with the Army Corps of Engineers. Alco awarded the instrumentation contract to Stromberg-Carlson.

Designed especially for service in Arctic regions, the reactor will be built in a number of packages that can be easily transported and quickly assembled.

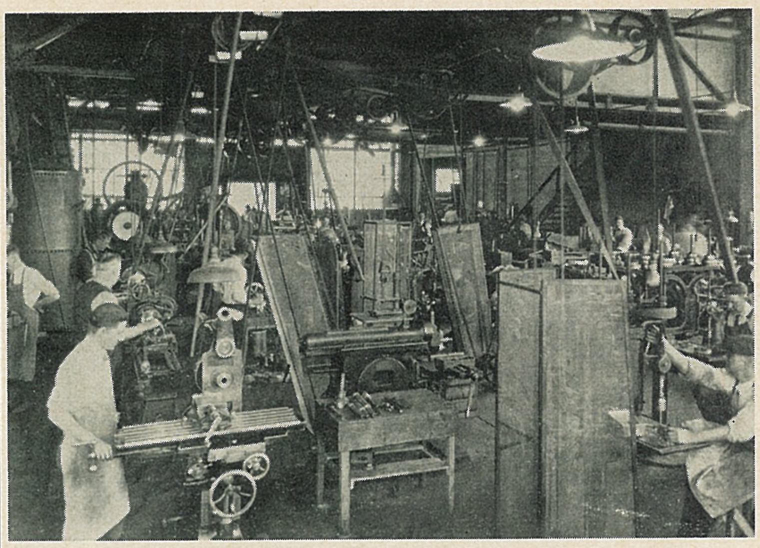
New Missile Division Created by Canadair

MONTREAL—Robert D. Richmond, formerly chief engineer of special weapons for Canadair, has been named a vice president and will have charge of a new missiles and systems division.

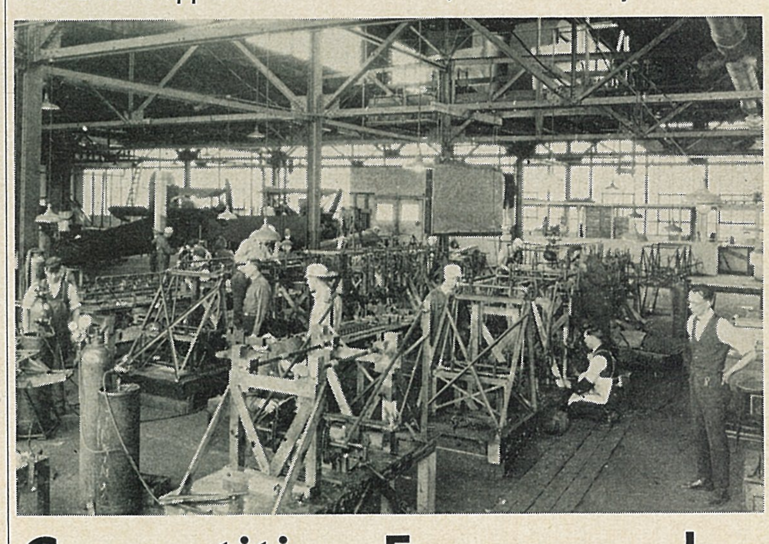
The move was interpreted as reflecting Canadair's determination to become a major sub-contractor for United States missile work.



"Now Hutton has a COMPLETE follow through."



A FAR CRY—This was machine shop at Consolidated's plant in Buffalo as it appeared in 1925. Below, another factory scene.



Competition Encouraged In Convair's Early Days

(This is the 10th installment in a continuing history of Convair. Previous installments have traced early beginnings as far back as 1908 which led to creation of Consolidated Aircraft in 1923, its move to Buffalo in 1924 where main product was trainer airplanes.)

Col. Virginius Clark resigned as vice president and chief engineer of Consolidated in August, 1927. George Newman Sr., who had been a director and general manager since the beginning, was elected vice president. Clark's place on the board was filled by Ray P. Whitman, a former project engineer at McCook Field, who had joined Consolidated as chief inspector in 1925. (He would serve as vice president from 1931 to 1935, then help form a new company.) Joseph M. Gwinn Jr. a Gallaudet engineer who had continued with Consolidated, was placed in charge of Unit 1 (trainer planes).

Fleet established Unit 2 (heavy planes) the same year, and eventually had four divisions at Buffalo, each under an engineer who reported only to him. The title of "chief engineer" was not used again until the mid-30s, though this displeased the Air Corps.

"I am a strong believer in competition, not only among companies but within my own organization," Fleet explained to his critics at Dayton. "My system induces each project engineer to make his best showing for the boss, not just another engineer. If you've got any complaints, come to me."

Fleet believed key personnel should own a small interest in the company, thus sharing its successes and failures. In 1925 he bought half of his sister's stock holdings (originally 40 per cent) and offered these shares equally to Clark and Newman, on credit. If either man left the company later, he was to surrender his holdings at what was then book value. At first neither accepted the offer. Later Clark bought a 6 per cent interest (15 shares) for $3,500, giving Fleet his note for that amount. Consolidated's business grew so swiftly that when Clark resigned two years later, Fleet paid him $125,000 for these shares.

The Air Corps Act of 1926 marked a turning point for military aviation. It set up a five-year purchasing program for both services.

The Army's initial appropriation would let it purchase 150 or more trainers, depending upon cost. (The price for Consolidated's planes had declined steadily as output increased—from $9,800 for the first PTs to $7,750 in the fall of 1926, and further reductions were projected.)

Fleet proposed to Maj. Gen. Mason Patrick, the Air Corps chief, that a single contract for 150 trainers be negotiated. This would permit Consolidated to order material in quantity without letups, and share the savings from mass production with the Air Corps. Patrick would make no commitment beyond an order for 50.

Fleet gambled on his own judgment—"I knew nobody had a better trainer, and nobody could design a better one."

He ordered steel tubing, spruce and other materials for 250 aircraft and kept the production line humming. The orders kept coming in, from the Army at intervals of 60 and 90 days (until its contracts totaled 170 planes) and from the Navy (which continued holding competitions that Consolidated always won). By the middle of 1927 Consolidated showed a cumulative profit of $867,000 on the service trainers it had built since 1923.

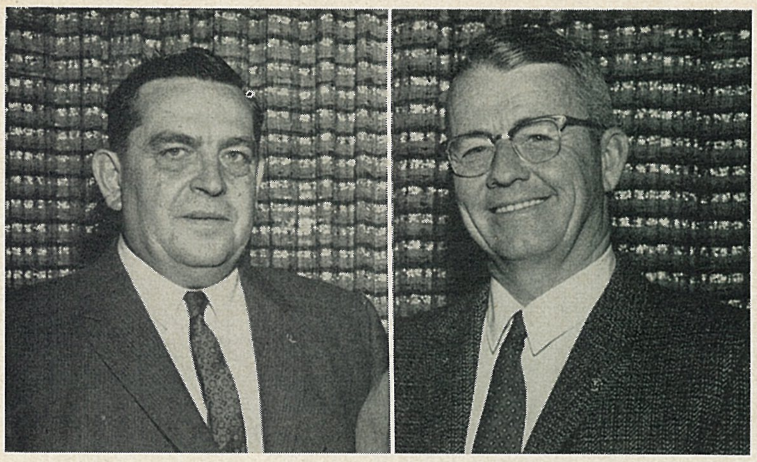
Correction for Convair Record

For the record, Convairiety's May 27 installment of Convair's history requires correction of two points:

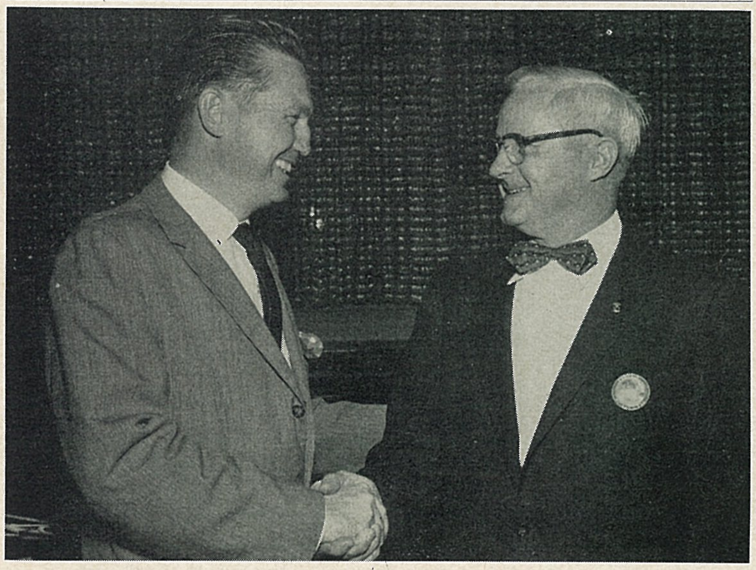
James L. Kelley, the Air Service representative assigned to Consolidated Aircraft when the company moved to Buffalo, was acting in a civilian capacity at that time. He was, however, a captain in the Air Service Reserve, on inactive duty. During World War II Kelley was San Diego Division manager, rather than factory manager, a post held then by Bert Bowling.

Kelley arrived at Buffalo considerably in advance of Consolidated's actual move. Felix J. Rossoll believes he was the first Consolidated man at the new plant and recalls hiring eight men to unload the three freight cars that carried the new company's equipment and materials. Previously, he had been with Gallaudet.

Rossoll is still with Convair.



NEWEST MEMBERS — Convair SD's Quarter Century Club gained two new members last month when Leo Budzynski (left), Dept. 101 asst. foreman, and L. O. Cederwall, chief of design services, completed 25 years service.



ANOTHER RECRUIT—M. J. Hayman (rt), Dept. 25-1 SD, receives congratulations from B. F. Coggan, SD manager, as he celebrated 25th anniversary with Convair.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period June 1 through June 15.

Thirty-year: Dept. 218, A. H. Springer.

Twenty-five-year: Dept. 14-6, F. J. O'Connor; Dept. 603-8, C. F. Berger.

Twenty-year: Dept. 6-51, R. H. Robbins.

Fifteen-year: Dept. 6-31, C. W. Alesch; Dept. 90, D. C. Burrows; Dept. 116-0, H. S. Schroeder; Dept. 123, W. E. McBride; Dept. 215, A. J. Capuccini; Dept. 231, June W. Fennell, C. H. Jones; Dept. 267, H. A. Anderson; Dept. 407, J. A. Blessing; Dept. 603-1, Lawson Willingham.

Ten-year: Dept. 4-1, A. B. Newman Jr.; Dept. 15-1, C. D. Foster; Dept. 34-1, W. M. Linhart; Dept. 97-3, L. I. Dunn; Dept. 115, H. L. Clason; Dept. 143, Jeffery Crowe; Dept. 145, Edward Dutra; Dept. 146, Opal P. Gamlin.

Dept. 204, K. S. Wills; Dept. 216, Ethel K. Eastlick, Bessie J. McNiel; Dept. 218, Mae W. Francis, Violet S. Kellogg; Dept. 230, F. L. Rosas; Dept. 231, Virginia M. Soloman, A. E. Schweitzer.

Dept. 266-0, Arlie Winningham Jr.; Dept. 280, W. T. Andersen, George Miller; Dept. 292-8, Jewel P. Moore; Dept. 401, H. E. Gaines; Dept. 406, G. C. Thomas; Dept. 603-6, S. P. White.

Promotions

SAN DIEGO

Promotions to or within supervision effective May 25.

Dept. 4-0, Material Office: To inventory control asst. supervisor, R. H. Horton.

Dept. 6-35, Engineering: To aero group engineer, N. R. O'Brien.

Dept. 34-1, Material Procurement: To buying supervisor, E. H. Amory.

Dept. 160, 880 Final Assembly: To asst. foreman, J. De Hope.

Dept. 171, Field Operations: To asst. foreman, H. E. Parker.

Dept. 267, Model 8 Final Assembly: To asst. foreman, B. F. Watson.

Dept. 271, Model 8 Field Operations: To asst. foreman, G. A. Brotherton.

Dept. 401, Jigs & Fixtures: To asst. foreman, W. L. Clapper.

Retirements

SAN DIEGO

WELCE—Reginald, Dept. 188-9. Seniority date Nov. 27, 1951, retirement effective April 30, 1959.

GREEN—J. J., Dept. 31. Seniority date Oct. 9, 1951, retirement effective May 5, 1959.

LEET—R. W., Dept. 25-9. Seniority date May 27, 1942, retirement effective May 28, 1959.

LORENZO—R. A., Dept. 206. Seniority date May 19, 1953, retirement effective June 1, 1959.

PURKEY—E. W., Dept. 3-1. Seniority date Oct. 24, 1947, retirement effective April 29, 1959.

RAKIS—N. G., Dept. 14. Seniority date April 19, 1955, retirement effective June 1, 1959.

Deaths

SAN DIEGO

BISHOP—Clyde B., Dept. 218. Died June 3. Survived by wife, Helen.

BISSON—Alfred G., Dept. 603. Died May 24.

BJORNSON—Bernard T., Dept. 6-21. Died June 3. Survived by wife, Martha.

CONDRA—Ernest M., Dept. 31. Died May 21.

JONELY—Arnold J., Dept. 14-1. Died May 30. Survived by wife, Anna, three brothers and three sisters.

Personals

SAN DIEGO

I wish to sincerely thank the Con-Trib-Club Emergency Aid and Blood Bank for the help given to me and my family during our recent medical and financial crisis.

H. B. Meyer, Dept. 6

* * *

I am sincerely grateful to Convair friends with whom my husband, A. J. Jonely (Dept. 14-1), worked for their many expressions of kindness and sympathy at the time of his death.

Anna P. Jonely

Births

SAN DIEGO

CAMPBELL—Son, Barry Alan, 8 lbs., 9½ oz., born May 25 to Mr. and Mrs. J. A. Campbell, Dept. 6.

GODREAU—Daughter, Adrien Marie, 7 lbs., 8 oz., born March 27 to Mr. and Mrs. Edmond C. Godreau, Dept. 6-51.

MARTIN—Twin sons: Samuel Earl, 6 lbs., 4 oz., and Edward Jackson, 5 lbs., 5 oz., born April 28 to Mr. and Mrs. Jack Y. Martin, Dept. 25-1.

ONEAL—Daughter, Ellen Elizabeth, 6 lbs., 8 oz., born May 14 to Mr. and Mrs. Jack H. Oneal, Dept. 6.

STARK—Son, Thomas Leonard, 7 lbs., 13 oz., born May 29 to Mr. and Mrs. T. C. Stark, Dept. 6-51.

VINEYARD—Son, Dana Lee, 5 lbs., 14½ oz., born May 18 to Mr. and Mrs. Claude Vineyard, Dept. 188-5. Mother, Julia Vineyard, on leave from Dept. 232.

Don Maxion to Teach Jet Systems Course At JC This Autumn

Don R. Maxion, Convair SD regional field representative in transport service, will be teaching a new course in jet aircraft systems this fall at San Diego Junior College.

Offered for the first time, the aviation course will deal with the Convair 880, Boeing 707, and Lockheed Electra.

It is being added to the school's curriculum to bring present aircraft students up to date on latest developments in the jet industry. Classes, held two evenings a week for the fall semester, will start Sept. 14.

SD DISTRIBUTION GROUP MOVES

Central distribution group at Convair SD has been moved into the same area occupied by central duplicating, in the southeast corner of Bldg. 1 mezzanine, Plant 1. Former location was on fifth floor of Bldg. 19. New phone number is ext. 1441.

CRA Again to Host IRC Shoot at Gillespie Field

Skeet, trap and rifle events of the sixth annual Industrial Recreation Shoot in San Diego will be hosted by the CRA at the Gillespie Field Gun Club location.

Firing in the rifle competition will start at 8 a.m. June 14. Skeet and trap shooting will start an hour later. Jack Swank, Gun Club commissioner, said combined teams representing SD and Astronautics would enter the competition. Also expected to participate is a contingent from Convair Palmdale.

Last year's shoot attracted 100 contestants, but Convair SD grabbed the lion's share of prizes, winning all but one first place.

Teams entered will consist of four or five firing members, an alternate, and team captain and team coach, representing an IRC member organization.

Fees have been set at $1.25 per entry for the rifle shoot. Skeet and trap prices (which includes birds) have been set at $2.50.

The Pistol Shoot will be held June 28, starting at 9 a.m. at the San Diego Police Pistol Range. It is being sponsored by the CRA Pistol Club.

Each winning team will receive a perpetual trophy. Individual trophies will be given members of each team placing first or second in each event.

Lorch, Phipps Lead SD Group In Tournament

Archery Club members from Convair SD blamed the Memorial Day weekend for a rather disappointing turnout at the Southern Border Archery Association shoot at the Kearny Mesa Range May 30-31.

Although 79 archers entered the competition, the turnout was somewhat below expectations. However, despite a strong crosswind, some good scores were tallied by participants.

Five Convair SD archers were among the winners. Bob Lorch (Dept. 403) snared second in the championship class. In the freestyle event, Al Phipps (Dept. 401) placed second in Class "A" while Bob English (Rose Canyon) took barebow honors with a first place in Class "B."

Two junior entries in the barebow competition were also shooting under auspices of the CRA club. They were Mike Phipps, who placed first in the championship class, and Eddie McDonald, who took second in Class "A."

Next event to be staged by the club will be a field shoot at the Kearny Mesa Range June 14, starting at 9 a.m.

Choralaires Plan Final Appearance

Choralaires, Convair SD's mixed vocal chorus, will make their final appearance of the season June 15 when they sing for the Grossmont Hospital Nurse's Graduation at La Mesa Junior High School.

The engagement will conclude a successful year for the singing group during which they made 12 appearances and presented three concerts. W. A. Vogel, director, said the scheduling of the Convair Pomona Missilemen at the annual CRA concert was well received and indicated that they will probably share the stage at a similar event next year.

Only event scheduled for the singing group during the summer will be a beach party at Santa Clara Point. Members will be notified well in advance. The group will resume activity after the summer lull sometime in September.

Five Years Ago...

Following are brief excerpts from Convairiety of five years ago:

★ ★ ★

Air Force YC-131C reaches altitudes of 30,000 feet—highest a 340-type plane has ever flown.

* * *

J. R. Dempsey is appointed program director of a Convair guided missile project.

* * *

Convair's "bow-loading" version of R3Y Tradewind makes first public appearance.

* * *

Air Force F-102 takes air route from San Diego to Edwards AFB for first time.

* * *

First Guided Missileman class, taught by Navy instructors, is graduated at Convair Pomona.

* * *

Giant stretch press, largest in the world, goes into production at Convair FW.

* * *

Thirty Convair FW men journey to Florida to put B-36 through test program.

Pecan Park Site For Car Clubbers

The June 17 meeting of the Convair SD Sports Car Club will be held at Pecan Park starting at 7:30 p.m. — not the Natural History Museum.

Another future event on tap for the club is a beach luau to be preceded by a treasure hunt June 27.

Drivers from Convair SD held their own and more at the Ryan Gymkhana May 24 in Escondido. Drivers included Bob Dunn, who took second place in Class One, and Dick Bauer and Jerry Wetterholm, who placed third and sixth, respectively, in Class Two. D. Hall was second and Bob Turner fourth in Class Three. Others winning honors were Dick Elms, Tom Jackson and Peter Aperlo.

A host of Convair drivers are expected to enter the La Jolla Invitational Gymkhana July 5 at the Del Mar fairgrounds.

DAHLIA CARE TOPIC AT GARDEN MEETING

Garden Club members at Convair SD will discuss the care of dahlias at tonight's (June 10) meeting which starts at 7:30 p.m., Floral Assoc. Bldg., Balboa Park.

23 at SD Receive Journeyman Certificates at Annual Dinner

Twenty-three Convair SD men were among those honored May 27 at the 18th annual apprenticeship completion dinner at the U. S. Grant Hotel.

The awards dinner culminated a four-year program for each of the graduates, H. W. Rubottom, chief of educational services at Convair SD, said. It was sponsored by the San Diego General Apprenticeship Committee, San Diego Junior College, the Division of Apprenticeship Standards, and the Bureau of Apprenticeship and Training.

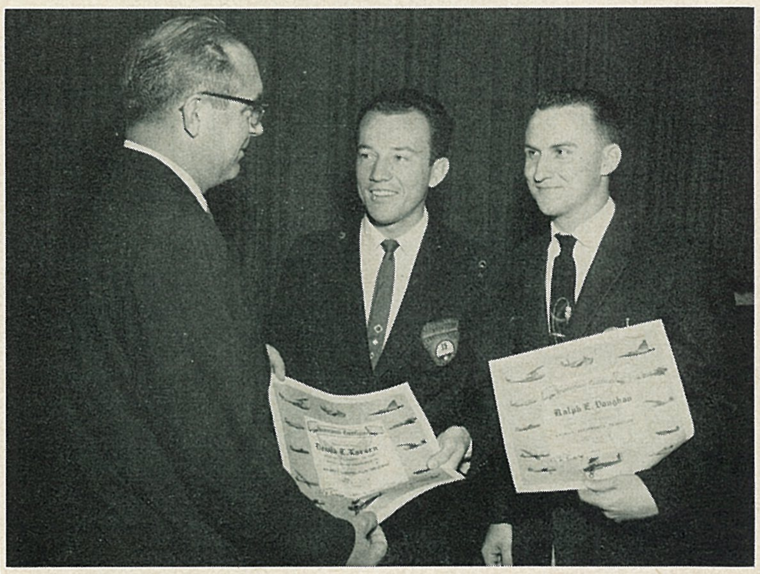
The dinner also kicked off special programs during the month of June, which has been designated as "Apprenticeship Month" by Governor Brown of California.

Two Convair SD men were singled out for special honors. They are Ronald L. Allison and Richard E. Kangas who were cited as outstanding apprentices in their trade.

Other new Convair SD journeymen in their respective fields are: aircraft construction, James T. Anderson, John L. Kerr and Donald T. Larsen; aircraft electronics, Ralph E. Vaughan; aircraft machinist, Merle E. Long, William J. Ryan and Calvin N. Woempner; aircraft and engine, Jack G. Roam and William L. Starbuck; industrial electrical, James A. Chappell Jr., Louis E. Fahland Jr., Albert G. Gillilan, John Henning Jr., and Robert B. Ley; plaster pattern, Edward J. Colonna; tool and die, Allison, Glenn L. Criger, Robert J. DuPont, Kangas, Donald P. Merling, Charles L. Weathers, and George J. Winchell Jr.; wood, metal and plaster pattern, Frederick K. Trusch.



HAPPY OCCASION—Annual apprenticeship completion dinner climaxed four-year program for 23 from Convair SD. They joined others from San Diego at dinner to which guests were invited.



NOS. 146 AND 147—O. W. Harper, chief of interceptor service at Convair SD, hands out journeyman certificates to Donald Larsen and Ralph Vaughan, 146th and 147th to finish apprentice training since program began in 1942. Larsen is now in Dept. 15 and Vaughan in Dept. 6.



BATTER UP—Shop league softball is swinging along at fast clip at Convair SD with doubleheaders being played twice weekly. Typical of action are these shots taken at game May 27 which pitted Dept. 603 against Dept. 25. Taking cut at ball (at far left) is Clay Brasel of the Plant Engineering team. In center: Steve Rivas gets foot off first base to avoid flying spikes. Upraised thumb of umpire can be dimly made out in background.

Help Needed to Finish Building So Boat Project Can Proceed

The building of 22-ft. fiber glass boats is already for high gear at CRA's "shipyard" at Gillespie Field.

However, there's one catch. Before the hulls start rolling off the production line, the boat builders' building has to be completed.

"There's just not that much work remaining to be done," Dale Cromartie, commissioner, said, "that we should run into a snag at this late date. With just a reasonable amount of assistance from SD folk we could finish the building this month."

Cromartie said the sooner the building is completed the sooner the actual boat building will commence. "We have to get the sheathing on the building, rig power lines and connections, ready the work area, and we'll be set to roll," Cromartie said.

And, as in the past, preference on the boat building list will be given those who helped with the work, Cromartie added.

E. R. Fink, boat building chairman, said the male plug for the 22-ft. boats has been completed and is ready for use in its new home. "That just adds another reason to get the building done and over with," Fink said. "All the material needed for the boats is on hand."

Because prospective owners pool talents to do the major portion of the work, the boats can be obtained for rock-bottom prices. And the work can be made a family affair. Fink pointed out that in the area are ample facilities for games, playing room for children, swimming at Gillespie pool, etc.

Final touches on the building are being accomplished evenings and Saturdays. To join up contact any of the following: Plant 1, Dale Cromartie, ext. 1650, or E. R. Fink, ext. 1144; Plant 2, L. Williams, ext. 523, or Glenn Grantham, ext. 583; Rose Canyon, Frank O'Connor, ext. 2416.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

AEROMODELERS — Flying competitions June 14 and July 5, Clairemont-Mesa Field at 8:30 a.m.

ARCHERY—Field shoot 9 a.m. June 14, Kearny Mesa Range.

ART CLUB — Life drawing classes each Tuesday, 7 p.m., Convair studios, Spanish Village, Balboa Park. Register with Gil Crosthwaite, ext. 1245, Plant 1.

BADMINTON — Play discontinued in Federal Bldg. until middle of July.

BOWLING — Awards banquet June 20, 6:30 p.m., Admiral Kidd Officers' Club.

BRIDGE — Session June 16, 7:30 p.m. Barcelona Hotel, 4th and Juniper Sts.

FISHING CLUB — Tickets on sale for Father - Son - Daughter Fishing Derby June 20.

GARDEN CLUB—Meeting tonight (June 10), 7:30 p.m., Floral Association Bldg., Balboa Park.

GLIDER CLUB—Meets every Saturday and Sunday at 10 a.m., Torrey Pines Gliderport.

GUN CLUB — IRC skeet, trap and rifle events at Gillespie Field range June 14, starting at 8 and 9 a.m.

JEEP CLUB—Jacumba outing June 14. Contact Art Thomas Wednesday evenings, 5-7 p.m., HI-4-1758.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. June 16—"At War with the Army" and "The Decks Ran Red." June 23—"Revenge of Frankenstein," and "Horror of Dracula." Admission: adults, 25c; children, 10c.

PISTOL CLUB — IRC shoot, San Diego Police Pistol Range, June 28, 9 a.m.

RADIO CLUB—Meeting at 8 p.m. tomorrow (June 11) at Harbor Drive Headquarters.

ROLLER SKATING—Monthly skate night Monday (June 15) at Skateland, Front and G Sts., 6:30-9:30 p.m. Free tickets at employee services, both plants, and from departmental representatives.

ROCKHOUNDS—Last meeting of current club year tomorrow (June 11), 8 p.m., Natural History Museum, Balboa Park.

SOLO FLYERS—New ground school course now under way at Jim's Air Service, Lindbergh Field.

SPORTS CAR CLUB—Meeting June 17, 7:30 p.m., Pecan Park. Beach luau June 27.

SQUARE DANCING—Family picnic June 28, 1:30-9:30 p.m., Pecan Park.

CRA Sports & Recreation Convairiety

CRA Glider Fans Rank High In Spring Soaring Contest

Convair SD glider enthusiasts played major roles in ground support tasks and others placed well up in the standings at the Elsinore Spring Soaring Contests May 16-17 and 30-31.

The top local entry was Ernie Shattuck (Dept. 6) who placed second in the four-day competition with a 2,629-point total. Les Benis of Los Angeles placed first. A Convair Pomona participant, Dave McNay, ranked third with 2,596 points.

McNay also took first in the overall standings on the second day of the meet while Shattuck turned the same trick on the third day. John Swinson (parts sales) flew 45 miles to West Palm Springs to earn the Silver Sea distance award.

Other entries from Dept. 6 included Ted Falk, Gene Whigham, and DeVaughn North. George Tweed of Astro also participated. Sterling Starr was contest director of the meet and Walt Mooney acted as chief tow pilot.

The Convair Glider Club contributed prizes for the winning contestants of each day's competition. CRA equipment (radios, barographs, etc.) was also used.

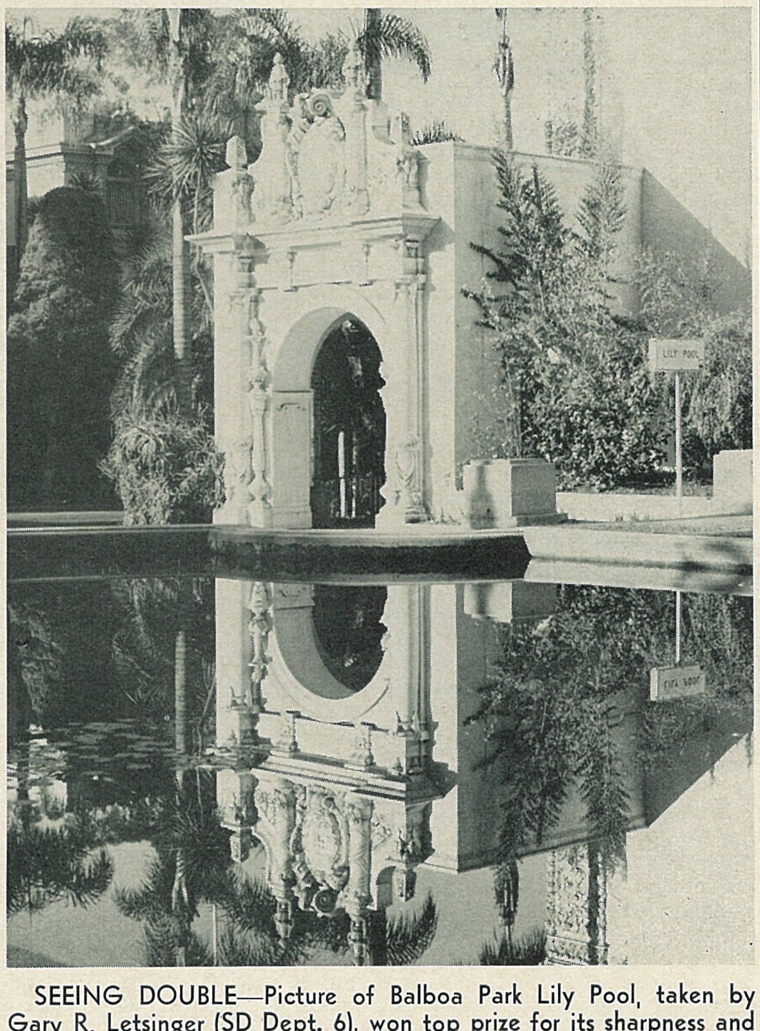
Sterling Starr, CRA Glider Club spokesman, said the group is now meeting every weekend at the Torrey Pines Gliderport and taking advantage of a training program at that facility. Group activities get under way on both Saturday and Sunday at 10 a.m.

Any Convair SD folk interested in joining the club or desiring additional information should contact Starr, ext. 2768, Plant 1.

Rockhounds Close Shack for Summer

The Rockhound Shack on Pacific Highway, across from Plant 1, will close for the summer after June 17, Dan Whorton, commissioner, announced last week. He said it would reopen the day after Labor Day (Sept. 8).

The group will conduct its last meeting of the current club year on June 11. Meetings will be resumed on Sept. 10, Whorton said.



SEEING DOUBLE—Picture of Balboa Park Lily Pool, taken by Gary R. Letsinger (SD Dept. 6), won top prize for its sharpness and contrast in latest quarterly contest sponsored by CRA Camera Club.

Eagles Sweep Four in Row

The Eagles, one of two Convair SD teams entered in the San Diego Triple A softball league, last week were flying high, wide and handsome after dumping their first four opponents to take the league lead.

And right on their heels is the Convair "A" team which picked up steam with two victories last week following a first-game defeat at the hands of Southeast Merchants 4-2.

The Eagles are establishing a reputation for winning the close ones. They slipped past a Sutton's Plasterers team 1-0; sneaked by the league favorite, Anderson's Furniture, 2-1; and edged the Southeast Merchants 4-2. In their other victory they pasted Ek and Ek Plasterers 10-2.

After their first game loss the Convair "A" team tripped up the Ek and Ek squad 1-0 and walloped the Sutton team 7-0. The league championship could well hinge on the outcome of a game played last Monday when the Eagles and the "A" team clashed head-on for the first time.

Ski Clubbers Enjoy Salton Sea Outing

A Convair SD Water Ski Club jaunt to the desert shores at Salton Sea June 6-7 was enjoyed by 33 participants, T. E. Mathews, commissioner, reported.

He said skiing on the smooth, warm waters of the inland sea was quite a change from the ocean variety. In charge of arrangements for the trip was Mike Alianelli (Dept. 223), assisted by Wayne Zook (Dept. 95).

Future events slated for the club include a breakfast on the Fourth of July off Gleason Point in Mission Bay at 7 a.m. The next regular business meeting will be a potluck supper July 7.

FLITE TEST, LOFT PACE SHOP LEAGUES

Flite Test pulled out in front with two wins to lead the National League and Loft roared to three victories to pace the American League as intra-plant softball swung into action last month.

Flite Test clipped Mock Up 8-6 and dumped 880 Wing 6-2. In other National League action 880 Wing whipped 880 Fuselage 10-5 and Plant Engineering poured across no less than 18 runs while trampling 106 Wing. In another game last week Tooling and Plant Engineering played a 9-9 stand-off that was halted by a time limit.

Over in the American League the pace-setting Loft team claimed victories over Parts Sales 8-6, Structures 9-4 and Rose Canyon 10-7. Lodged in second place was Experimental who edged Air Conditioning 1-0 and Parts Sales 10-2.

Pistol Club Hosts Annual IRC Meet

The Convair SD Pistol Club will sponsor the annual Industrial Recreation Council Gun Shoot June 28 starting at 9 a.m. at the San Diego Police Pistol Range.

The event will replace the regular club shoot, formerly scheduled for the same date, Ash Bishop, CRA commissioner, said. Five four-man teams will represent Convair in the competition.

At the May 24 club shoot B. L. Broadway (Dept. 603) swept both the .22 police course event and the short national with scores of 295 and 278 respectively. W. G. Walker (Dept. 6) tallied 283 points to pace entries in the expert class and Dorcas Utter (wife of Arley Utter, Dept. 129) led the field in the sharpshooter class with 262 points.

Half-Price Tickets Set for Drury Lane

Discount prices will prevail for Convair SD folk for the next production of the Drury Lane theater group at the La Jolla Community Theater.

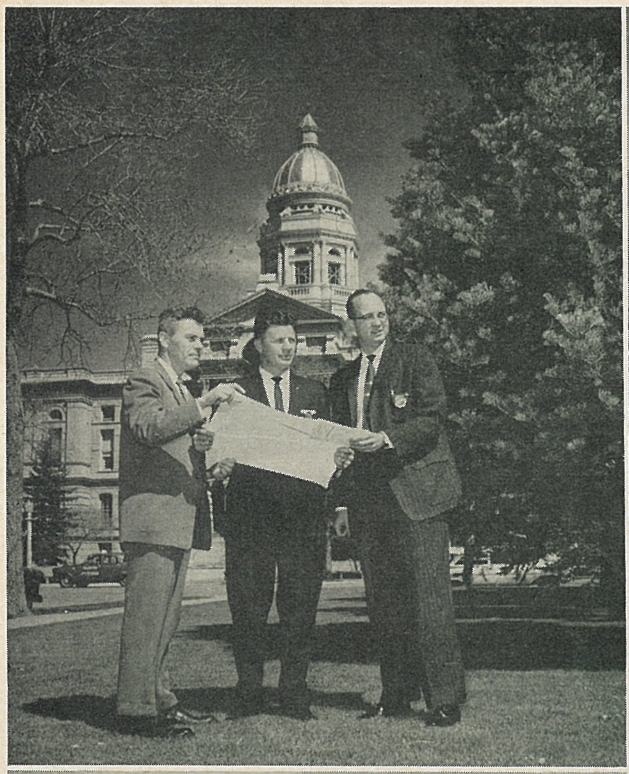
Tickets at half price (75c) will be available at employee services, Plants 1 and 2, for the June 22, 24 and 25 engagements. Three one-act plays—two comedies and a drama—will be presented. Included are Eugene Ionesco's "The Bald Soprano," John Martin's "Box and Cox," and "Hello Out There" by William Saroyan.

Badminton Halted Temporarily at SD

Regular Convair SD badminton nights on Tuesday in the Federal Bldg., Balboa Park, will be discontinued until the middle of July, Tom Richardson, commissioner, said last week.

"The building will be used for a variety of events during that time," Richardson said, "and we will have to hold off our play until it again becomes available after the middle of July."

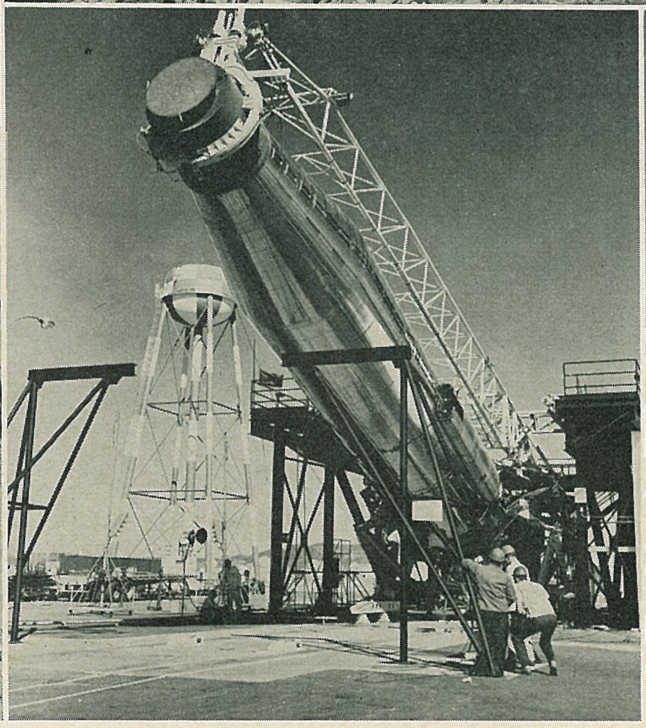
He reminded badminton enthusiasts that limited accommodations are available in the Electric Bldg., Balboa Park, but added these are on a first-come, first-served basis.

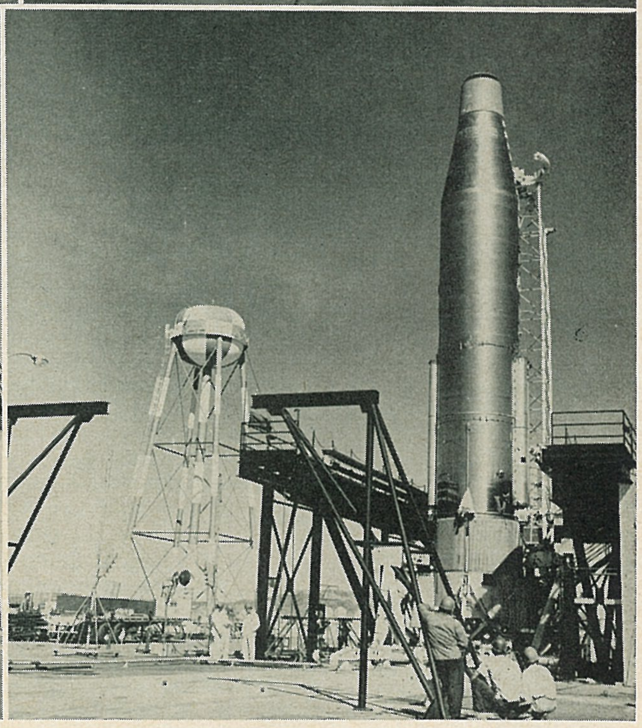












NUMBER ONE—First operational Atlas base will be at Cheyenne, Wyo., shown in top center aerial view. Launch sites are under construction at some distance from city. They will be operated by 706th Strategic Missile Wing, located at Warren AFB, one-time cavalry post (top right). Erector-launcher mechanism which will be used is shown in two lower right pictures. Top left, in shadow of state capitol located at Cheyenne are, from left: T. B. Ragland, staff assistant; George A. Calvert, operations manager; and J. N. Mattson, chief of industrial relations. Lower left, pictured at one of launch sites under construction are, from left: Calvert, Ragland, Mattson, R. W. Mendenhall, S. R. Stager, J. J. Williams, L. Dassoff, E. E. Hixon.

Horizontal Storage Planned For Atlas at Launch Sites

Atlas missiles will be stored in a horizontal position in launch facilities now under construction at widely scattered points around Cheyenne, Wyo. The facilities will be manned by Strategic Air Command units with headquarters at Warren AFB.

Convair Astronautics is presently expanding its work forces there for approaching surveillance work in construction, equipment installation, checkout and actual activation of the launch sites.

Visitors to the sites who have seen Atlas test bases will note the absence of giant gantry towers used to hold the Atlas upright for servicing prior to tests. Instead, they will see buildings that seem to fit snugly into the surrounding areas of hills and rolling plains.

Launching pads at Warren are shaped much like a stubby "T." The long base contains the missile storage area, erector mechanism and other facilities. Across the bar are rooms for mechanical, electrical and propellant transfer equipment, work areas and storage facilities for fuel, liquid oxygen, liquid nitrogen and helium. The launcher centers the bar with a flame bucket jutting out from the top.

Nearby is what the Air Force calls a launch operations building. Astro employees will recognize it as what has been referred to as a blockhouse.

Missiles are towed into the storage area aboard their handling trailers. The missile's base is attached to the launch mechanism while a clamp on the 70-foot erector boom fits over the missile in the area of the nose cone. Lifted clear of the trailer, the missile is ready for storage, handy for work, etc.

The roof above the storage area slides back on rollers. Closed it provides protection from the weather and enemy action.

The entire operational concept for the Atlas is based on the shortest possible time lapse between the order to fire and actual launch. Operations are counted by the Air Force in terms of minutes rather than the hours now required for heavily instrumentated test base launches.

Pressing a single button activates the fully automatic control system for erecting the missile. First, the roof rolls back; the erector boom begins to pivot and pull the missile into position, upright; automatic checkout of various systems gets under way as the missile is rising. By the time the missile is upright, only a short time will be required before fueling operations can be started.

Total time lapse: less than two minutes!

The process can be reversed to return the missile to storage.

Warren AFB at Cheyenne To Be SAC's First Fully Operational Atlas Base

Convair Astronautics has started a build-up of its worl force at Warren Air Force Base, Wyo. that will continue throughout the remainder of this year.

Warren is the first fully operational base slated to receive the Atlas ICBM as a weapon system.

Astro forces there presently number just over 100. In the next few weeks some 150 men and women working at other localities such as the Astro home plant and Vandenberg AFB will be shifted to Warren. Additional transfers of skilled workers will follow as needed. At the same time a local hiring program will be pursued to add others.

By late December the Warren force will number over 600.

George A. Calvert, operations manager, directs Warren activities. He reports to C. F. McCabe, base activation manager, who, in turn, is responsible to E. A. Reynolds, Astro's manager of product support.

The Warren operation is unique in many fields. As the initial operational unit developed under Astro's base activation program, it will be responsible for formulating and proofing many of the features to be followed at subsequent bases. To this base will come hundreds of officers, noncommissioned officers and enlisted airmen who have learned their trade in an all-out training program conducted by Astro for the Air Force. These will be the men who have learned about the Atlas by working alongside Astro employees in the factory or by handling actual missile parts in classrooms.

Bulk of the present Astro work force at Warren is housed in what is called the base's industrial area. In time, others will work in the squadron maintenance area and at the actual launch sites.

The launch sites are under construction at points some distance from the main base.

Communication and transportation between these scattered sites and Astro's administrative offices will become a major problem in itself.

Key supervisory jobs have been filled in the Warren operation. Reporting to Calvert is a line-up of chiefs of various functions including R. W. Mendenhall, J. J. Williams, L. Dassoff, J. N. Mattson, S. R. Stager, T. B. Ragland and E. E. Hixon. The latter is presently acting as top engineering supervisor.

Warren, because of the absence of test operations, will require far less engineering personnel than Astro test base operations.

Most Astro employees will find homes in Cheyenne, just three miles from Warren. It is the capital of Wyoming with a population of about 37,500. With the base personnel and outlying areas added, Cheyenne has a metropolitan population of about 66,000.

Rentals in Cheyenne are about the same as those in San Diego. At present there are 117 new homes under construction. However, developers are laying out many adjacent areas for residential purposes. Astro maintains up-to-date rental listings for employees.

Cheyenne is 6,062 feet above sea level and lies on the rolling plains that approach the Rocky Mountains, less than 75 miles away. The climate is mild and dry. Although winter temperatures go into the minus zero ranges, the city boasts of having almost 300 days of sunshine each year, more than Miami Beach, Fla.

Before the coming of the missile "era" Cheyenne relied heavily upon railroads (three pass through the town), oil, stock raising and manufacturing for its economy. Tourism is also a major financial contributor.

For the outdoorsman, Wyoming is a natural. There are 20,000 miles of fishing streams and 130,000 acres of lakes with 83 species of fish, mainly varieties of trout. Big game population is over 200,000 including elk, moose, bear, deer, bighorn sheep and antelope. Wyoming boasts of an antelope population alone that outnumbers its people!

Once Indian Fighter Post, Warren Has Been in Defense For Century

The military reservation that is Warren Air Force Base has been involved in defense for almost a century.

Local citizens boast of its role as a "sentinel of the nation" from "the arrow to the Atlas."

Founded in 1867 as Fort D. A. Russell, the reservation was established as a cavalry post to protect crews building the first trans-continental railroad from hostile Indians. Cheyenne grew up nearby as a construction camp and supply center for the Union Pacific. Today it remains a main terminal point for east-west transportation.

Through the years the post served cavalry troops, infantry, field artillery, quartermaster corps, aviation engineers, Air Force technical schools and now will be the first fully operational base for the intercontinental ballistic missile.

In 1930 the name was changed to Francis E. Warren AFB in honor of Wyoming's first territorial governor and later state senator. Warren was also the father-in-law of Gen. John J. Pershing.

The present major occupant of the base is the 706th Strategic Missile Wing, Strategic Air Command. Brig. Gen. William R. Large Jr. commands. It is one of the units of the 15th Air Force.

Warren lies just outside the northwest city limits and just three miles from downtown Cheyenne. It is a remarkable facility in every sense of the word.

Some of the buildings now in use date back to 1885. They are tall, stately red brick structures with white columns. For the most part they face a huge parade ground.



"This new craze has run me completely out of sacks."

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

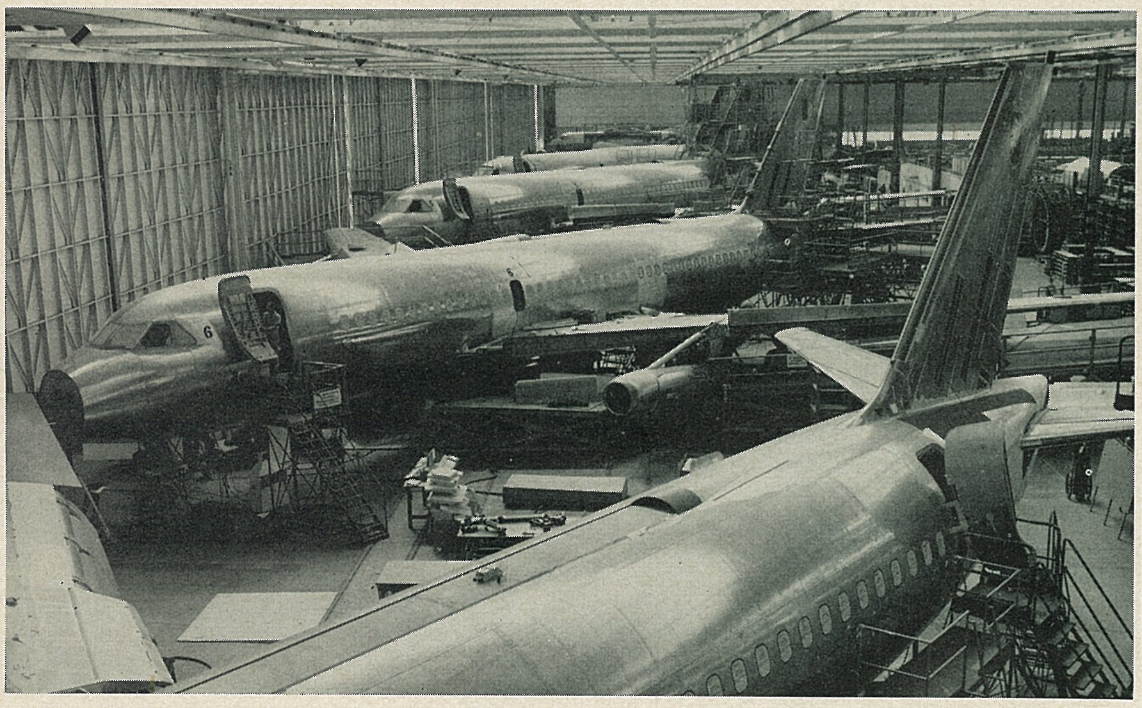
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San Diego EDITION

(Serving San Diego Division of Convair)

SD Division news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



"NEST" OF 880s—Convair jet transports are filling Convair SD's Bldg. 3 at Plant 1 with four of giant birds in various stages of completion nestled side by side across west bay area. No. 4 is due to go to field operations latter part of July.

SD Division Gets $2 Million Order For Radar Work

Convair San Diego has received a $2 million contract for design and manufacture of an undisclosed number of radar systems for Autonetics Division of North American Aviation, Inc., R. E. Honer, chief electronics engineer, announced last week.

Honer said the navigation-bombing equipment will be used in North American's A3J carrier-based attack bomber being built for the U.S. Navy by North American's Columbus, Ohio, Division.

The system's ground terrain display enables the pilot to pinpoint his target.

The current contract in the amount of $1,996,038, with approximately $1 million in spares expected to follow, will push Convair's electronic contracts in the radar field with North American to well over the $10-million mark for the last two-and-a-half years. First contract was received from the Autonetics Division of North American in December, 1956.

Completion of research, development, design, and manufacture of the present number of radar systems is scheduled for June of next year, said Honer.

Convair's part of the program is being directed by J. E. Bowen as project engineer.

Turbo-Compressors Accepted, Installed

Three ship's sets of the final configuration of Convair 880 turbo-compressors have been accepted by Convair SD and are now installed in planes Nos. 1, 3, and 4.

The turbo-compressors, built by Hamilton Standard, division of United Aircraft Corp., Windsor Locks, Conn., pressurize the 880's cabin and flight deck for passenger comfort regardless of altitude.

At altitudes up to 21,000 feet, the units maintain sea level pressures inside the plane. At higher altitudes, cabin pressure gradually increases to the equivalent of 8,000 feet when the transport is flying at 35,000 feet.

Besides acting as a pressurization unit, the turbo-compressor provides fresh air for the air conditioning system which maintains a 75-degree temperature and 40 per cent humidity level in the cabin.

Although each 880 will be equipped for a pair of turbo-compressors for normal operation, full pressurization can be maintained by one of the units.

Fourth Jet 880 Readied For Field Ops. in July

Four big Convair 880 jet transports are lined up for the first time in the final assembly building (Bldg. 3) at Convair San Diego Plant 1.

Three of the giant birds spread-eagled across the west bay of the building are in final assembly work while the other one (No. 7) is in major mate, said Harry G. Rote, final assembly superintendent. By mid-December, Rote said he expects to have all major mate and final assembly stations—four final assembly and four major mate—filled with near-completed 880s.

Next plane to be released through the big sliding doors will be No. 4 which is scheduled to go to field operations July 22. First plane to have interior configuration installed, No. 4 is in final assembly undergoing completion of interior trim.

First ship's set of 12 club compartment seats has been received from Chance Vought Aircraft Co., Dallas, Texas, for installation in the lounge of the plane. For the time being, Convair-Liner 440 passenger seats will be used during testing until 880 passenger seats arrive some time this fall.

Plane No. 4 is due to join planes No. 1 and 3 in flight test in mid-August for testing of acoustical and air conditioning systems.

The next companion ship on the final assembly line, No. 5, will be the first Convair 880 to bear the colors of a customer airline. It will be painted with the red and white insignia of Trans-World Airlines.

The 13th Convair jet transport will take its place on the line this week after its wing sections have come out of the Scotchweld oven. Wings for ships No. 14 and 15 are now in the wing bucks and those for No. 16 are due in about the first of July.

"All the lines moves are right on schedule," reported C. W. Clark, wing assembly general foreman. "Assembly work on the 880 is proving most satisfactory, surpassing all expectations for a new version."

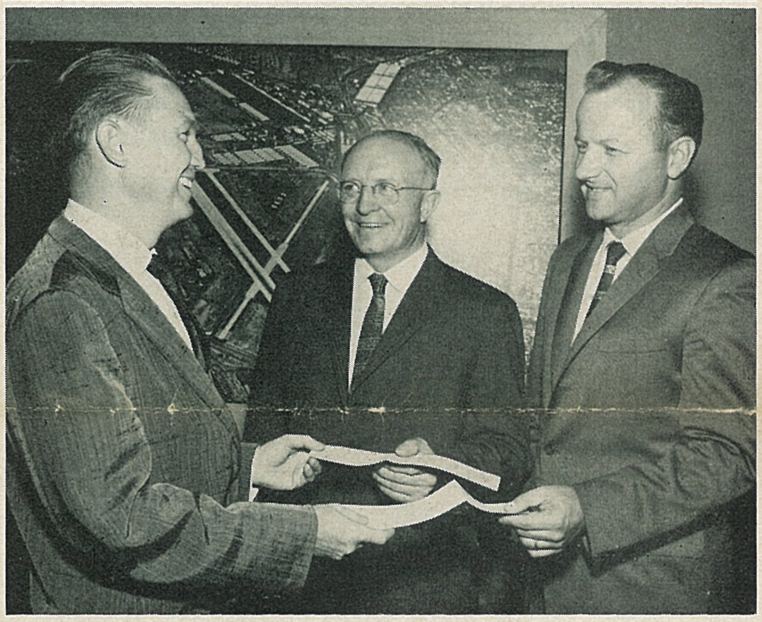
Planes are now moving down the primary line at 16-day intervals between station moves. Wings are coming out of the bucks every 12 days to go to the Scotchweld oven. Although it takes 24 days for wings to be assembled in the bucks, the ships are going into the bucks on a staggered schedule so that a complete ship is moved out every 12 days.

Four planes (Nos. 10 through 13) are now in wing primary locations with Nos. 8 and 9 in major mate stations at the north end of Bldg. 2.

Detailed fabrication is now in process for the Convair 600 with the first of the sister ships to the 880 scheduled to go onto the production line in mid-November. First sub-assemblies for the 600 wing will start on July 20.

"Although the 600 wing is practically an entirely new design from that of the 880, we anticipate no difficulty whatever in transferring our production crew to the new Convair jet transport," explained Clark. "Our experience on the 880 has given us the know-how for construction of heavy structures so that the transition should be accomplished smoothly."

American Airlines has contracted for 25 of the Convair 600s with an option on an additional 25.



REWARD—B. F. Coggan, left, San Diego Division manager, presents $1,000 check to Don Kennedy, center, and $500 check to G. E. Trimlett. Their "RX" ideas on cost reduction, sent to Coggan personally, were judged best submitted in April.

$1,500 More Collected For May 'RX' Proposals

Ideas are paying off to the tune of $1,500 again this week at Convair SD as the "RX" campaign moves past the halfway mark.

The winner of the May $1,000 award is Ralph DeSola, an engineering writer in Dept. 6, who submitted a proposal on a less expensive way to produce off-set plates that will save Convair an estimated $38,182 during the next year.

Hugo A. Kayes, an accounting supervisor in Dept. 91, will pick up a $500 check for his "RX" idea that cuts processing time of military spares exhibits, revisions, and contracts documents from the 15-day period formerly required to nine days.

DeSola and Kayes join Don W. Kennedy (Dept. 116) and G. E. Trimlett (Dept. 6), the April winners, and are in the running for the $2,000 Grand Award to be given after the July judging.

"The caliber of the 'RX' proposals submitted thus far is evident in the fact that the four proposals that won the April and May awards will save the company in excess of $200,000," B. F. Coggan, SD Division manager, said.

"Compare this with over 4,000 'RX' ideas that have poured over my desk. Many of these suggestions have been put into effect. Some individual savings, naturally, are not as spectacular as those of the four winners, but the total saving to the company is a substantial amount.

"We still have more than a month to go in the campaign and during that period I especially encourage those who have not yet participated to do so," Coggan added.

The $1,000 "RX" proposal submitted by DeSola eliminates the need for metal plates in off-set reproduction and instead employs a low-cost Colitho paper plate. A new technique of direct-light printing is used which does not require a laboratory developed negative.

Convair will realize a savings of $8,812.54 during the next 12 months on Kayes' proposal.

'RX'

April $1,500... GONE
May $1,500... GONE
June $1,500... GOING
And still to come:
July $1,500... and
Grand Award $2,000

Hospital Pledges Climb Near $1½ Million Mark

Contributions to the Tri-Hospital Fund Drive at Convair SD and Astronautics are expected to total more than $1½ million during a three-year period. This is based on statistics available late last week.

Campaign officials made the prediction based on projected final returns and estimating an average hourly wage for each employee.

Pledges to support the drive at the two divisions had shot past 60 per cent of the total population with more than six thousand cards still to be returned or processed at presstime.

At Astro 8,000 employees had approved the Tri-Hospital payroll deduction. Another 2,217 cards were still to be returned.

Approximately 12,350 at San Diego, Plants 1 and 2, had okayed the deduction with another 4,200 cards yet to be processed.

Campaign officials noted that even among the number of cards that had not authorized the gift, many stated they would be willing to contribute at a later date when personal circumstances would permit them to do so. Also, many who declined the deduction made cash gifts. At SD Division these have gone over $1,000.

On the other side of the ledger, officials said a surprising number have volunteered to contribute more than the required amount. Some have asked that their deduction be increased from one day's pay a year for the three hospitals to one day's pay annualy for each one of the hospitals.

As the drive goes into "clean-up week," campaign teams, including a union shop committeeman and a member of supervision, are continuing to make personal contacts with employees who have been on vacations, sick leaves, etc.

Employment Climbs To 15,000 at Astro

Employment at Convair Astronautics early this month passed the 15,000 mark.

Through June 14 the total was 15,176. Of these, 12,561 were assigned to the San Diego area; 1,101 at the Air Force Missile Test Center, Fla.; 914 at Vandenberg AFB; 390 at the Missile Static Test Site, Edwards AFB; 209 at Warren AFB. These figures apply to employees permanently assigned.

Two Million Expected to View Exhibit This Year Featuring Convair Products

A traveling display designed to exhibit models of all of Convair's products to the general public will make its debut at the Iowa State Fair in Des Moines the last of August.

An estimated 500,000 people will view Convair's planes and missiles in a week's time at the Des Moines fair before the display is moved on, probably to the Oakland Air Show the first part of September.

"At least two million people thoughout the United States will have a chance to become acquainted with Convair's products before the end of the year," said L. W. Fitzgerald, manager of special activities.

The 15x15-ft. display will be made of masonite for lightness in weight and for a smooth surface for painting. It can be folded and packed in cartons for shipment. Models of Convair planes—880, 600 jet transports, F-102 and F-106 interceptors, B-58 supersonic bomber—and missiles—Atlas ICBM; the Terrier and Tartar, shipboard-launched guided missiles—will hang in separate sections.

The design, conceived by R. A. Eckhart, Convair graphics manager, was worked out in Convair's art department. The display is now under construction by Hunt & Johnson Display Co. of San Diego.

Five Years Ago...

Following are brief excerpts from Convairiety of five years ago:

★ ★ ★

Air Force XC-99, world's largest operational aircraft, returns home to Convair SD for first time in four years.

* * *

Air Force purchases of B-36s will total more than one billion dollars when last plane rolls off FW line this summer.

* * *

YC-131C, Convair-built twin engine turboprop transport, demonstrates one engine flight and one engine landing.

* * *

K. J. Bossart is appointed to head a guided missile project at Convair SD.

* * *

Peaceful development of atomic resources holds key to world prosperity and peace, John Jay Hopkins, president of General Dynamics Corporation, tells National Management Association meeting.

* * *

Navy officers and enlisted men, who eventually will fly or service Convair-built R3Y turboprop "Tradewind," finish special ground school training course at Convair SD.

Scholars Given Summer Jobs

Convair San Diego scholarship holders have come "home" to Convair for the summer months.

Thirteen, and possibly 14, undergraduates who are attending colleges and universities throughout the country on Convair SD sons and Management Club scholarships will be assigned to posts in the engineering department. Three girls, winners of Management Club scholarships over the last three years, are among the student employees.

The entire list includes: J. M. Starr, R. E. Knudsen, C. E. Cartmill, D. H. Boltz, Nancy M. Seid, L. E. Fischer, F. J. Hunemuller, Melanie Rohr, Marcia Fritz, Vernon Booth, G. C. Krumweide, Allan Roy King, John C. Rayko, and, tentatively, William Dickey.

The students plus ten faculty members are the only summer hires to be placed on Convair SD's payroll this year, reported M. C. Curtis, industrial relations administrator-engineering.

The instructors are from San Diego State College, San Diego Junior College, the city high schools, and one each from the University of Illinois and Purdue University. Most have spent at least two summers at Convair San Diego.

Bruce Named Material Mgr.

W. R. Bruce, formerly chief of subcontracting, has been named San Diego Division manager of materials, reporting to T. J. Sullivan, assistant division manager, contracts, customer service and material.



W. R. Bruce

For the present, Bruce will continue to hold the responsibilities of chief of subcontracting.

Reporting to him are W. G. Evans, general purchasing agent, subsystems; R. L. Donoghue, general purchasing agent, raw materials, purchased parts, facilities and supplies; G. W. Zahrte, chief of material control; M. F. Moseley, chief of material estimating, material forecasting and cost administration; F. R. Field, chief of traffic and material stores; P. W. Bethea, material project coordinator—jet transport program; P. H. O'Dell, material project coordinator — F-106 and GSE.

Bruce joined Convair in 1956 after 15 years with Solar Aircraft where his last post was head of the material division.

SD Second Shift To Give Blood

Second-shift people at Convair SD Plant 2 will line up tomorrow evening (June 25) to donate blood at the monthly bloodmobile visit.

The bloodmobile will be located in the south end of Bldg. 3, Plant 2, between the hours of 5 and 9 p.m.

Donors are reminded that their blood will not be accepted if they eat or drink anything except water or black tea or coffee within four hours before giving blood.

Convair Son Given Citizenship Medal

Barry Coggan, son of B. F. Coggan, Convair vice president and San Diego Division manager, was one of 13 San Diego County high school students to receive Good Citizenship Medals and Certificates at the close of the school term.

The awards, made by the San Diego chapter of Sons of the American Revolution, are for qualities of dependability, cooperation, leadership, and patriotism. Barry is a student at La Jolla High School.

★ *Convairiety* ★

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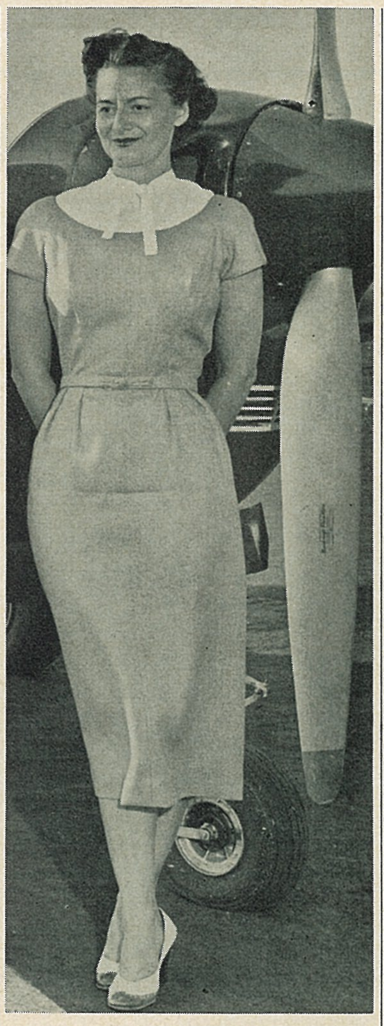
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Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



RACER — Terry Vasques of Convair SD Dept. 6 leaves this week on annual Transcontinental Air Race.

SD Aviatrix Enters Race

For the second year, Convair SD's aviatrix, Terry Vasques of Dept. 6, will be flying coast to coast in the annual All-Woman Trancontinental Air Race.

Terry, a SD dynamics engineer for over four years, will leave San Diego this Friday (June 26) in her Beech Bonanza D35 to reach the starting point, Lawrence, Mass., by takeoff time on the Fourth of July.

She will be accompanied by Anna Christensen, a Rohr Aircraft Corp. secretary, as co-pilot on the 2470-mile cross-country course which will terminate at Spokane, Wash., on July 8. The two San Diego women will take off from Lawrence Municipal airport in No. 3 position.

Terry estimates that they will have 50 hours actual flying time in the air by the time her plane drops down on home field after the return trip from Washington.

She has already logged 330 hours in the nearly five years she has been flying with two cross-country trips to New York and back as well as other jaunts to Mexico City, the Midwest, Seattle, San Francisco, and numerous shorter trips.

Her husband, Horace Vasques, Astronautics senior electronics engineer, also holds a pilot's license.

The Air Race is sponsored each year by the Ninety-Nines, Inc., an international organization of licensed women pilots.

Busy Weekend Set For SD Hoedowners

The June 27-28 weekend for Convair SD Hoedowners will be jam-packed with events scheduled for both days, P. E. Liggett, commissioner reported.

On Saturday night, starting at 8 p.m., Van Van der Walker and Bob Daugherty will share the program, calling for the monthly party night dance at the University Heights Community Center, 4044 Idaho St.

On Sunday the group will invade CRA's Pecan Park to stage the annual Square Dance Picnic. It will be a pot luck dinner affair and is scheduled to start at 1:30 p.m. Free refreshments, including coffee, punch and ice cream, will be furnished for members of the Hoedowners. Liggett said there would be games and prizes for adults and children.

Junior Achievers Close Books On Two Business Ventures

Junior Achievement groups, sponsored by the Convair SD Management Club, have liquidated holdings and closed up shop for another year.

Both groups, the LRB JA Co. and the M & M JA Co., piloted by Convair SD advisers, cleared up their operating expenses, disposed of all equipment and materials, sold all their products, and paid off their stockholders with a profit by the end of last month. They had been in operation since last October.

M & M Co. sold 354 collapsible book and magazine holders at $1 each and was able to declare a 20 per cent dividend to stockholders at the end of the term.

LRB Co. sold 134 lunar rocket banks made in the shape of a miniature Atlas missile at $2.98 to $2.50 each. In spite of the high cost of materials and tooling, and correspondingly lower profits, a two per cent dividend was paid stockholders.

"We feel that, more important than making a large profit, the young people taking part learned the basic principles of operating a business venture," said W. H. Marshall, Management Club's chief adviser for the JA program. "They learned the hard way that no money came in unless they actually produced."

Directing the LRB Co. were Marshall, C. D. Saxon, and O. Browning, all of Dept. 25. Advisers of the M & M Co. were W. E. Gille and C. Kildgore Jr. of Dept. 25, and D. H. Quinn of Dept. 8. E. R. Fink acted as JA chairman on the club's board of control.

Con-Trib Votes $50,366 Gifts

Convair SD Employees' Con-Trib-Club Committee voted $50,366.47 for charitable organizations during the month of May. The total figure included $2,632.67 for emergency aid to 13 Convair SD employees.

Besides the prorated monthly contribution of $43,750 to the United Fund, donations went to six other individual agencies.

Scripps Memorial Hospital received $1,000 for purchase of a large Whirlpool therapy machine for physiotherapy treatment of both in- and out-patients. Salvation Army campership program was given $1,250.

Crippled Children's Society of Los Angeles County received $200 for purchase of a tape recorder to be used in the Antelope Valley speech program for handicapped children. Other donations went to International Guiding Eyes, Inc., $300; County of Los Angeles Bureau of Public Assistance, $400 for the Antelope Valley Good Neighbor fund; and Family Service Association, Foothills Branch, $750 for operating expense.

Camera Club Sets Workshop Session For July Meeting

A photo workshop and the third quarterly contest will highlight the July meetings of the Convair SD Camera Club.

Earl Beebe of the Lens Art Club will discuss "Projected Backgrounds for Table-Top Photography" at the July 13 workshop which starts at 7:30 p.m. in the Photo Arts Bldg., Balboa Park.

Club members are asked to bring tripods and cameras to the session and Beebe will give advice on setups. Beebe discussed the same subject at the April Photo-Fab held by the local chapter of the Photographic Society of America.

The subject and judge of the July 22 quarterly contest will be announced at a later date. Additional information on Camera Club activities can be obtained by contacting Ron Ainsworth, ext. 2362, Plant 1, or BR-6-0694. Visitors are welcome at all activities.

CONVAIR DAUGHTER WINS ESSAY AWARD

Laurie Phyllis Wohl, daughter of E. P. Wohl, Convair vice president—planning, June 16 received the first-place award in the fourth annual Essay Contest sponsored by the San Diego County Industries Association. A student at Hoover High School, her prize-winning essay was entitled "Industry's Debt to the Community."

Baseball Draw Set for July 8

Baseball fans at Convair SD will have another opportunity to win free seats for Padre home games when CRA stages its fourth drawing of the year.

Entry deadline is July 8 at 4 p.m. Tickets will be good for games to be played between July 14 and Aug. 2 during which the Padres will host Sacramento, Spokane, Portland, Seattle and Vancouver.

To enter, write name, clock number, shift, department number, location and telephone number on a slip of paper. Two tickets will be awarded each winner but only one entry per person is allowed.

Boxes are located in employee services, Plant 1 and 2; at Rose Canyon, in the office of Dorothy Kniffen, Bldg. 2, ext. 2239; at Fordham St., office of Bessie Cooper, ext. 100; gun butts, at field operations inspection office; ramp, thermodynamics laboratory.

Eight Tuition-Free Courses Offered at San Diego Division

Convair San Diego people will have a choice of eight aircraft courses to be given within the plant this summer at no tuition charge. Although most of the classes start this week, registration will remain open until next Wednesday (July 1).

Instructors will be Convair San Diego men, all holding teacher credentials from the State of California. Given under the auspices of San Diego Junior College, some of the courses are eligible for units toward a degree. All classes are held out of working hours.

As classes are limited to 30 students, all interested in entering are urged to contact M. M. Saunders, educational services, ext. 491, for registration.

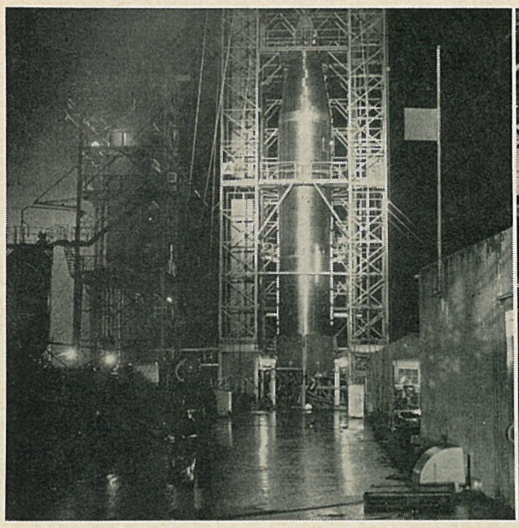
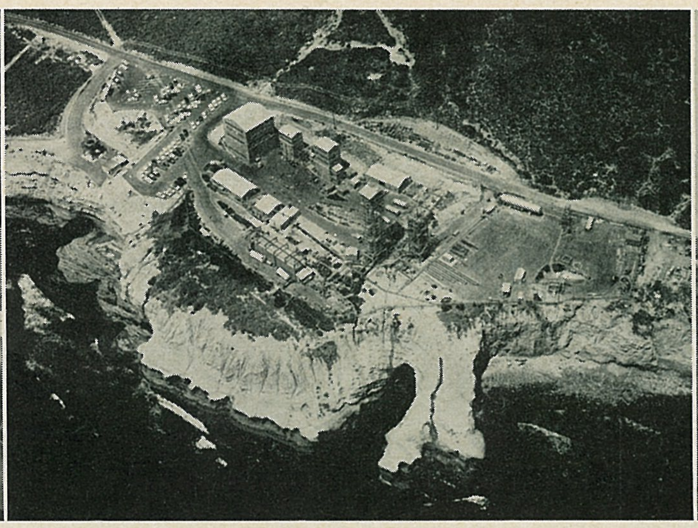
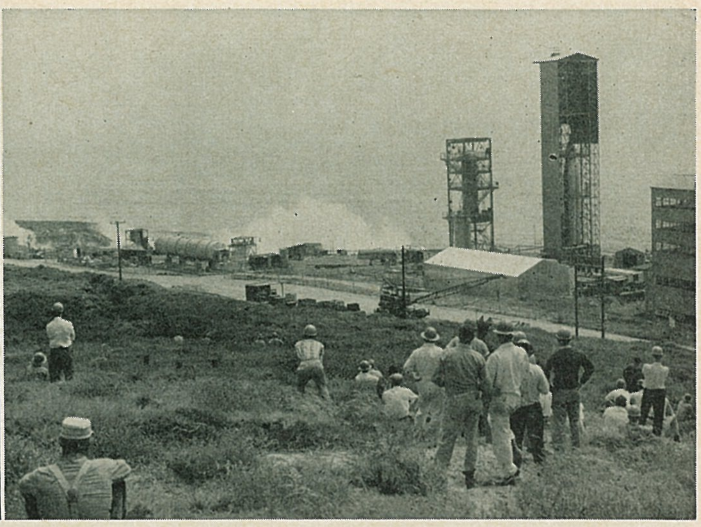
Classes offered and instructors are: Blueprint Reading and Sketching, A. T. Barrie (Dept. 6); Basic Electricity, Thoburn Starkey Jr. (Dept. 15-5); Basic Electronics, Harold G. Ayer (Dept. 15-4); Intermediate Electronics, W. Dale Dyer (Dept. 6); Advanced Electronics, Newton Grant (Dept. 6); Aircraft Machine Shop Math, two classes, Elias Margolin (Dept. 6) and J. A. Bailey (Dept. 403); Blueprint Reading, E. L. Johnson (Dept. 403).

College Counselors Will Be at SD July 7

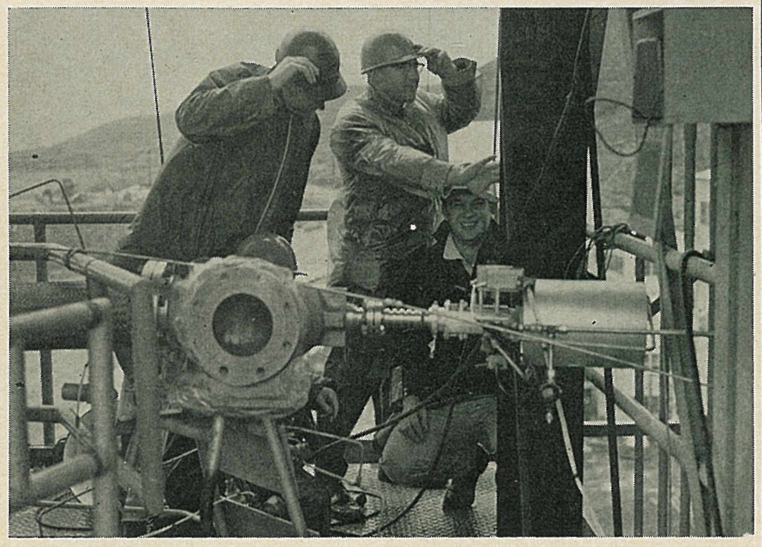
Interviewers from San Diego State College will be at Convair San Diego on July 7 to counsel Convair SD people who intend to enter the college's evening program for the fall term.

Anyone intending to take either graduate or undergraduate work is asked to call M. M. Saunders, SD educational services, at ext. 491 before the Tuesday date to set up an appointment.

Prospective students will find out if they are qualified for admission and will receive help with their course of study before they apply for registration this fall. Final registration date is Sept. 7.

ALMOST DOWNTOWN—Point Loma is oldest, but least known, of Astronautics test sites for AF's Atlas missile. Center is general view showing buildings at site, plus Pacific coastline. At left is rainy night shot of fuel tests. Certain tests require evacuation of personnel (right) who watch smoke rise from nearby hillside.



HOLD YOUR HAT—Wind and rain lashing in over Pacific provide ideal elements for special tests. They also cause Joe Dudash, M. H. Greenspan and Lon Jordan to clutch their hard hats as they work high atop tall fuel flow test tower.

Point Loma 'Granddaddy' Of All Astro Test Bases

BY BRYAN WEICKERSHEIMMER
Convairiety News Editor, Astronautics

If you want to bake, broil or freeze; drop, immerse or squeeze; shake, rattle, pound, pull or merely test to destruction missile parts, systems or components; then Astronautics has the equipment for it.

Chances are, this equipment is now on hand or can be set up at Astro's Point Loma test site near San Diego.

Point Loma has long been Astro's "silent" member among test bases. Little has been written about it. However, it is the "granddaddy" of them all in age. In December, 1953, Convair leased the 50-acre site from the Navy. Activation came in October, 1954.

(Convair missile testing on Point Loma actually dates back to 1947 when static tests on Convair's ICBM research rocket, the MX-774, were conducted on a 13-acre site north of the present installation.)

Perched on a shelf just above the Pacific, the test site is surrounded (outside the security fences) by a brush-covered area. A single road provides access. Although the site is readily visible from the ocean side, special effort is required to view it from the ridge of Point Loma.

These windswept reaches have long been a boon to Astro men performing special wind and rain tests. When these climatic conditions occur, there are usually Astro men braving the elements.

Point Loma is a branch of the engineering test laboratories at Astro and as such fall under the supervision of R. S. Campbell, chief of test labs. R. C. Hinck, group engineer, is in charge at the site.

However, individual tests are set up and conducted by test engineers from such groups as systems, components, instrumentation design and other labs. Dept. 756 contributes the main work force and performs most of the mechanics of preparing for tests. Foreman J. D. Jones heads this group. Many other departments have representation among the 160 employees assigned there regularly.

Point Loma is virtually all "male." No women are assigned there. The feminine element revolves around a daily visit by a plant nurse and an occasional visit by a woman engineer.

Tests performed can involve complete missiles, although most effort is involved in component and sub-assembly tests. Test specimens may be straight from the assembly line or may be "one of a kind" items. They can also be missile parts from other test bases. For instance, Atlas missile tanks now being tested in one installation came from a missile previously static tested at Astro's operation at MSTS, Edwards AFB.

Duration of tests vary from a few seconds to more than a month. Some call for an around-the-clock vigil, although normal operations at the site are conducted on a two-shift basis.

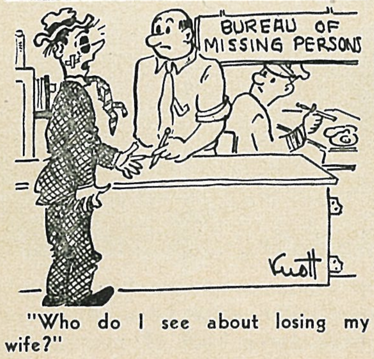
Remoteness of the area is one of its key assets. Some tests considered potentially dangerous call for evacuating the area. Crews watch from vantage points along nearby slopes or a reinforced concrete blockhouse.

Campbell this week voiced high praise for those who man Point Loma.

"We have much standard test equipment available," he said. "But some items we need just can't be purchased. When this happens our people build what they need, showing great originality.

"I know of few occasions when results weren't forthcoming on schedule," Campbell added.

(Point Loma's unique new environmental chamber, which can accommodate an entire AF Atlas missile, will be covered in a later story.)



"Who do I see about losing my wife?"

Novel 'Aerial Photograph' System Used to Design B-58 Crew Stations

Unique to the aerospace industry is Convair Fort Worth's system of three dimensional measurement used to design crew stations for the B-58 Hustler and produce refinements.

Called "photogrammetrics," the new method was developed by Convair engineers after the idea was batted around at Wright Air Development Command. Actually it works much like aerial photography.

Jack Chaffee of the human factors group said it is important in crew station design for engineers to know the exact amount of movement a man can make efficiently from any given position. For instance, they need to know how far the right or left hands can move to reach controls.

To achieve this and to have a permanent record of data, Chaffee and the human factors group, with an assist from photo lab crews, applied the photogrammetric process.

Design engineers placed 211 different subjects physically representative of pilots and crew members, in a simulated B-58 station and started the cameras going.

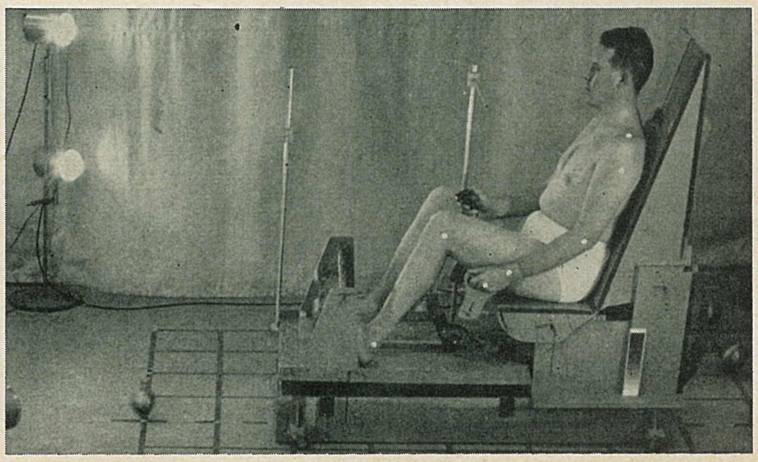
Each subject—clad only in trunks in order that his movements could be pinpointed with precision—was "spotted" at numerous key points on his body with white discs.

Three studio type cameras, one above and two facing the subjects from different angles, were set up. All cameras recorded at the same time.

The subjects, seated on a marked off grid area, were illuminated by six strobe units. Special wires were also used from floor to ceiling to help form the grid.

After the pictures were processed, precise measurements were calculated by algebraic scale by plotting x, y and z to various grid points.

Not limited to development of the crew stations, engineers are now using photogrammetrics in testing muscular strength to see how much force pilots put on controls in the supersonic Hustler.



HUMAN ELEMENT—"Model" sits in seat in photogrammetric measurements lab. Three cameras shoot from three different angles, recording limits of movement. Note white "dots" attached to subject. These enable engineers to plot measurements mathematically.

880 No. 1 Will Be Laid up For System Up-Dating

Both of Convair's jet transports now in flight test status have been away from home base during the past week.

Plane No. 1 spent last weekend (June 19-21) at North Island Naval Air Station on public display at the annual Navy Relief Benefit Carnival.

After returning to Lindbergh Field, No. 1 is back in its stability and control testing program. Piloted by Don Germeraad, chief engineering test pilot at SD, with W. D. Carrier, production flight pilot, as co-pilot, the first 880 will continue the current testing throughout the rest of this week.

Present plans are to put the plane on lay-up status next Monday for several weeks to bring it up to date with system changes which are intended as production configuration after they are proved out. After the recommended changes have been evaluated, flight test engineers expect the first completed 880 to be ready for FAA check-out on control systems.

The second 880 in flight test, plane No. 3, flew to Edwards AFB Monday of this week (June 22) to spend a week-and-a-half (until July 1) undergoing take-off and landing tests with John Knebel, engineering test pilot, at the controls.

The present desert testing is a preliminary workout for plane No. 3 before it is sent back to Edwards in mid-August for a six-week period of maximum weight performance tests in take-offs and landings. At that time, it probably will undergo FAA certification for that portion of the testing program with an FAA pilot flying the big transport.

Co-pilot with Knebel in recent flights has been A. P. Wilson of production flight. Both Wilson and Carrier are being checked out in the 880s in preparation for the time when they will be piloting one of the white and gold ships.

Ohman Checked Out in TF-102A, Transitional Trainer for B-58

Brig. Gen. Nils O. Ohman, commanding general of the 19th Air Division, Strategic Air Command, early this month received his delta pilot's credentials for checking out in a TF-102A at Carswell AFB, Texas.

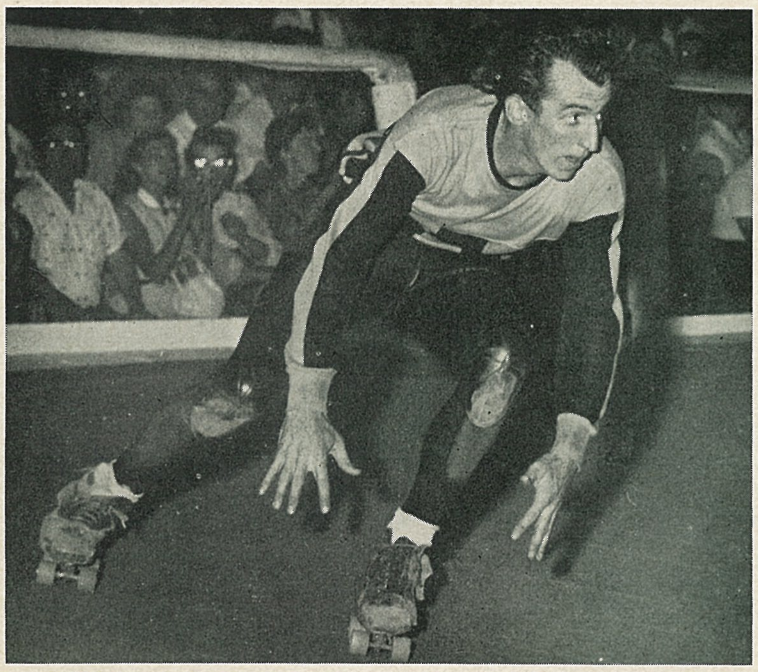
The Convair-built TF-102A is being used as a transitional training aircraft in the current B-58 Test Force at Carswell. Before a pilot can be checked out in the B-58 he must complete six hours and ten landings in the TF-102A. One ride must be with a qualified B-58 pilot.

The TF-102 was chosen as a transitional aircraft to the B-58 because of its delta wing configuration as well as similar flight characteristics of the two Convair planes. The B-58 Test Force is at present a joint ARDC and SAC operation with SAC slated to assume full responsibility for the program early next year.

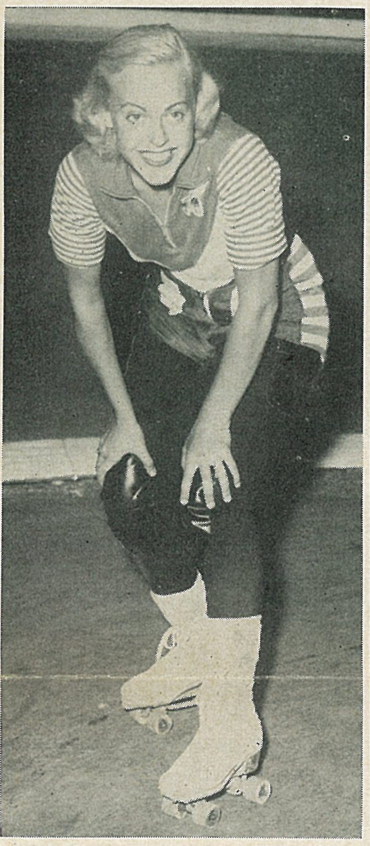
SAC pilots checked out in TF-102As so far are Col. R. E. Evans, commander of the 3958th OE&T Squadron, Lt. Col. A. W. Blizzard, Maj. T. E. Clodfelter, Maj. H. E. Confer, Maj. H. J. Deutschendorf, and Maj. J. W. Valentine. ARDC pilots checked out are Col. David M. Jones, director of the B-58 Test Force, Lt. Col. F. Finberg, Maj. L. W. Amos, Maj. E. E. Bradly, Maj. V. M. Kummel, Maj. K. K. Lewis, Maj. J. R. Phillips, and Maj. E. E. Jahnke.



CHECKED OUT—Brig. Gen. Nils O. Ohman, commander 19th Air Division SAC (second from right) receives certificate as proof of check-out in Convair TF-102A from J. S. McQuay, Convair SD field service rep. at Carswell AFB, Texas. Looking on is A. S. Witchell of Convair Fort Worth customer service at far left and Col. David M. Jones, B-58 Test Force director (far right).



COMING THROUGH—George Vogt of Convair SD flashes form of old that won him "most valuable player" award in professional Roller Derby competition in 1952. Vogt traveled to Europe and Australia as player and coach of some of top pro teams.



DERBY DARLING — Carole Vogt, now working in General Offices, combined charm with skating prowess to attain recognition in early '50s as one of top gal Roller Derby skaters.

Perilous

Roller Derby Pro Recalls 'Maple Days'

A Convair SD man has literally skated his way around the world.

Before joining Convair three years ago George Vogt (Dept. 15-10) was player and coach of some of the top professional Roller Derby teams that ever "pushed maple."

For nine years Vogt was one of the highest priced players on the Derby trail. He performed with and coached such teams as the Brooklyn Red Devils, the Chicago Westerners and, more recently, the San Diego Clippers.

"The Roller Derby was big business," Vogt recalled last week. The salaries paid were commensurate with the risks involved. Average pay for a pro skater was $9,000 a year, and the veterans got considerably more, in and around the $17,000 bracket.

"I feel I earned every cent of what they paid me," Vogt said. "While skating I picked up a broken back, a broken jaw, a broken leg and an indefinite number of broken ribs."

For Vogt the Derby trail led to England, France, Australia and all over the U. S. "We were well received in England, in fact our stay was extended three weeks. In Australia, too, we were given a fine reception.

"But the biggest thrill in terms of crowd response was at Madison Square Garden in 1951 and '52. Both years, for seven days in a row, we attracted standing-room-only crowds of around 19,000. In those years it was an all-time high, consecutive run attendance record for the Garden."

The Roller Derby is a rough and tough game, Vogt said. "Sure, some color is added, skaters teeter off balance on purpose and a few of the spills are exaggerated but on the whole the sport is legitimate."

Vogt should know. In 1952, while with the Brooklyn Red Devils, he won the "most valuable player award," an honor similar to that given in the baseball world.

However, in the Vogt family, George doesn't have a monopoly on Roller Derby fame. His wife, Carole, just a few years ago was one of the top gal stars. Now working in Dept. 1-52 in General Offices, she also won a "most valuable player" award the same year as her husband.

Although most of his playing days are behind him Vogt still keeps active in the coaching line. "The first thing a young skater has to be taught is how to fall. Then the technique for 'riding the groove' with the maximum amount of speed and maneuverability. How to operate while skating in a 'pack' is an art in itself," he explained.

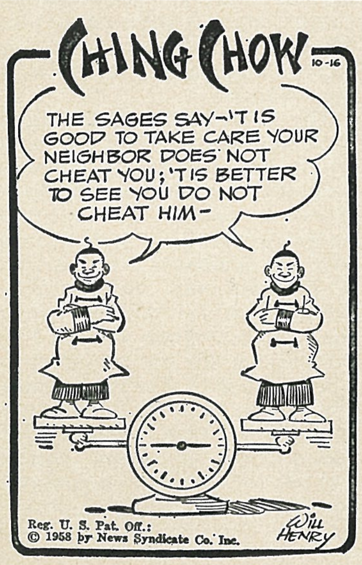
Convair FW Counts 250 'Pro' Engineers

Four Convair Fort Worth flight test engineers are new members of the Texas Society of Professional Engineers, Frank Clayton reported this week.

They are: Donald R. Foreman, Raymond R. Hall, Gary D. Haltom and Thomas L. McCutcheon.

Clayton, chief of plant engineering and a director-at-large of the organization, said approximately 250 Convair men are Registered Professional Engineers. Of these, more than 130 are members of the Texas Society of Professional Engineers.

Twenty-five Convair employees have received certification as professional engineers during 1959.



Convair FW Man Goes to Moscow To Help Build Unique Fair Exhibit

E. J. (Jim) Boone, technical editor on the Convair Fort Worth nuclear program, has returned from a seven-week tour of duty in Moscow.

On leave of absence from Convair, Boone was a member of an American party assigned to build a theater-in-the-round similar to Fort Worth's famous Casa Manana. Arranged by the U.S. Department of State, it will be used as a trade fair exhibit and ultimately will be sold to the Russian government.

"Twice the size of the Casa Manana, the new theater has a 112-foot radius, which makes it the largest theater dome in the world," Boone reported.

Boone, who learned the Russian language in an Air Force course at Syracuse University and is a part time instructor in TCU's Russian department, served as translator and engineering administrator for the American visitors. Construction was largely a "package deal" with prefabricated parts coming from the United States. Russian labor was used for assembly.

The Russians worked an "American" shift of 8 a.m. to 5 p.m. during construction of the gigantic theater.

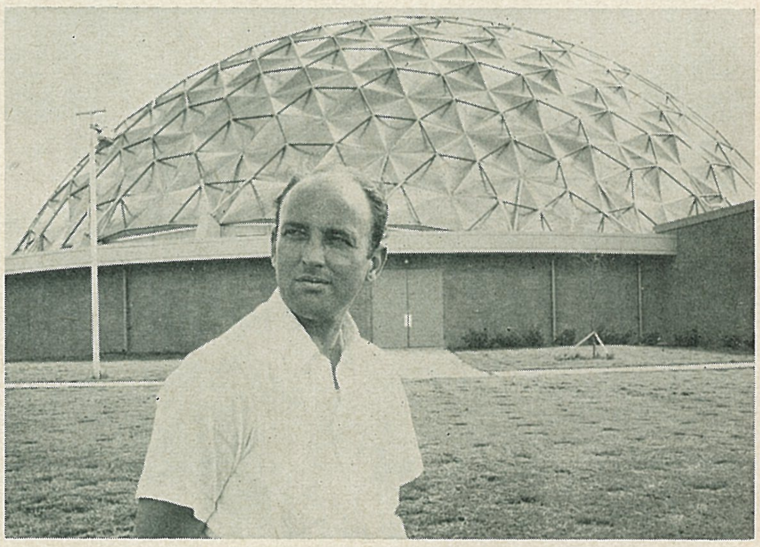
Incidentally, Moscow stores open at 11 a.m. and remain open until 8 p.m., six days a week.

Boone found opera and ballet more popular than movies in Moscow. Motion picture houses show no American or English films, only Russian, Polish and Spanish. Radio stations play only classical music and folk songs, but Boone noticed records of popular tunes on sale at music stands.

"Churches — Russian Orthodox, Baptist, Catholic, Jewish—appear well attended, though almost all churchgoers are 40 years or older," he noticed.

Autos are scarce in Moscow (gasoline is 45 cents a gallon) but the subway system is the best Boone has ever seen. The average Moscow resident makes the equivalent of eight or nine dollars a day and most likely lives in a crowded apartment. Population of Moscow is five and a half million and there is a tremendous housing shortage.

"The people were most friendly," he added.



MOSCOW VISITED—Convair Fort Worth's E. J. Boone pauses in front of Casa Manana Theater, replica of which he helped build in Moscow earlier this year.

Interpreting South Sea Dances Specialty of Convair Girls Trio

"Sign language," based largely upon hand movements and an occasional hip flip, can be entertaining to "read." It can also be hard work.

A trio of Convair girls, students of the art, can testify to the latter. For those who have seen them perform, the former needs little elaboration.

The women are interpretative dancers specializing in the dances of the South Sea islands.

Kamamalualoma (Lucky) Papke of Astro's Dept. 182, Tai Boyd of San Diego Division's Dept. 98, and Jeannie Cox, wife of Roger Cox of Dept. 214-3 at Astro, work either as a team or singly. Professionally they are known as "Aloma," "Tai," and "Leilani."

They have performed for over a year at clubs, private parties and a growing number of luaus in the San Diego area.

For "Aloma" and "Tai" the dances come naturally. Both were born in Hawaii and have danced as long as they can remember. Through the years they have added to their natural abilities through observation and study. For "Leilani" the story has been different. A native of Honduras, she was drawn to Spanish dances until she began studying under the other two.

"We make up our own routines as well as relying on traditional themes," Mrs. Papke said. "However, in each there is a story to tell of love or frustration or pursuit. This we convey by use of the hands.

"Hand movements, to the rhythm of the music, tell the story. We use hip movement merely to stay with the rhythm," she added.

Music is normally provided by guitars and drums with the dancers using rocks, gourds, hardwood sticks and bamboo sections to add effect.



SIGHTLY ARTISTS—These Convair girls, Kamamalualoma Papke, Jeannie Cox and Tai Boyd, perform South Sea Island dances as team and singly. Here they show costumes, bamboo sections, feathered gourds and hardwood sticks, used for effect.

Space Primer Sales Top 100,000, Definitely in Best Seller Class

Convair has never had a "best seller" quite like its Space Primer, a product of Astronautics' editorial section of communication department.

The 72-page booklet made its appearance in January of this year. The initial press run of 75,000 copies sold out in two months. In March a second run of 100,000 copies was made. Over half of these have been dispatched.

Space Primer is a concise, well-written introduction to the field of astronautics. It deals, in an easy-to-understand style, with such subjects as rocket propulsion, motion of satellites, ways in which man can reach the moon, etc. In addition, there is a simple glossary of rocket and space terms, a list of books and magazines on space and a section telling how to prepare for a career in astronautics.

While the booklet was aimed at the high school student, it has found popularity with all ages.

Thousands of grade school students have requested copies. So have many colleges and universities and such organizations as the National Geographic Society, General Intelligence Agency, Library of Congress, American Rocket Society and the United States Information Service.

Astro has filled requests for copies from countries around the world.

Astro sells the booklet for 10 cents (slightly less than publication and distribution costs). It is available to employees through employee services outlets.



SWAMPED—Marie Trabbold of Astro communication department "digs out" of pile of Space Primers which have become a Convair "best seller." Requests have come from all over globe.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

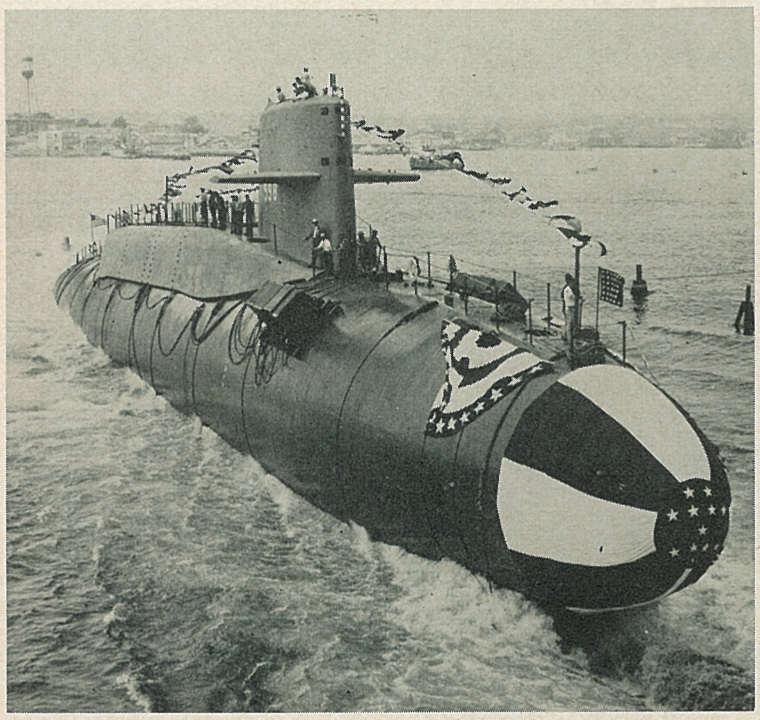
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

* * *



GEORGE WASHINGTON — First ballistic missile equipped atomic submarine, George Washington, splashed into Thames River this month. It was built by Electric Boat Division.

General Dynamics Enlarges Liquid Carbonic's Activities

NEW YORK—General Dynamics Corporation has acquired the industrial and medical gas business of the Hench Associated Gas Enterprises, Rex L. Nicholson, president of the Liquid Carbonic Division, announced last week.

Nicholson said that the acquisition of stock in the various companies comprising Enterprises involved "several million dollars" and was a cash transaction. He said that the Hench group is the strongest independent in the industrial and medical gas field.

Frank Pace Jr., chairman of the board of General Dynamics, commented that acquisition represents another step in the corporation's planned program to achieve an approximate balance in defense and commercial profit margins.

The activities of the Hench Gas Enterprises cover most of the eastern seaboard from Maine to Florida and extend inland into Ohio. Principal products are oxygen, acetylene, argon, nitrogen, nitrous oxide, hydrogen, and welding equipment.

Nicholson said that the acquisition of these important facilities will enable Liquid Carbonic to become a more effective competitive factor in the industrial and medical gas business on a nationwide basis.

Keim Chief Engineer Military Products

ROCHESTER — Appointment of David Y. Keim as chief engineer — military products of the Electronics Division of Stromberg-Carlson has been announced by Kenneth M. Lord, division director of engineering.

Keim previously served as engineering department head for microwave and electronic equipment for the Sperry Gyroscope Co.

STROMBERG-CARLSON APPOINTS PIERCE

SAN DIEGO — Robert R. Pierce has been named purchasing agent for Stromberg-Carlson here, according to Dr. Donald G. Wilson, general manager.

Pierce will be responsible for all purchasing activities at the San Diego facility.



NAUTILUS—Frank Pace Jr., left, chairman of board of General Dynamics Corporation, presents scale model of Nautilus to Dr. Leonard Carmichael, secretary of Smithsonian Institute in Washington, D.C. Model will become permanent part of Naval History collections. Nautilus was built by Electric Boat Division.

540 Scores in Fuel Economy

MONTREAL — Exceptionally good performance, fuel economy and serviceability of the Canadair-Convair 540 jet-prop airliner have been proved on a very successful one-month sales and demonstration tour of South American countries.

The tour included flight demonstrations at Bogota, Lima, Santiago, Buenos Aires, Porto Alegre, Sao Paulo, Rio de Janeiro and Caracas. One of the highlights was on May 31 when President Juscelino Kubitschek of Brazil was flown 575 miles from Rio to the new capital of Brasilia.

The 540 flew a total of about 19,000 miles of which 16,000 were point-to-point trips and the remainder local demonstration flights. Of the 95 flying hours, 72 hours 10 minutes were spent on point-to-point and route-proving trials, and 22 hours 50 minutes were taken up by local flights.

Favorable comment was made by pilots and passengers alike on the 540's extremely good performance in takeoff and climb, the low noise-level in the cabin and the almost complete lack of vibration from the two Napier Eland jet-prop engines.

F-102s Slated For ADC Shoot

Convair-built F-102As will join other Air Defense Command all-weather interceptors in weapon system evaluation at Tyndall AFB, Fla., this fall. The William Tell II operations will extend over ten days, Oct. 14-23.

F-106s, Convair SD's newest jet interceptors due to go into operation with ADC, will not take part in the maneuvers, although they will be on display and will make fly-bys during the show.

Flying high over the Gulf of Mexico Test Range, ADC interceptors will pit their skill against near-sonic targets before press, radio, and television representatives from across the country.

Targets will be jet-propelled radar-guided drones, one-fifteenth the size of a modern bomber, which can take evasive actions similar to those of attacking bombers. Radar operators on the ground will direct the planes toward the tiny targets flying at altitudes up to 50,000 ft.

Coggan Honored By Alma Mater

B. F. Coggan, Convair vice president and San Diego Division manager, received the first distinguished alumni award at recent commencement exercises of Michigan State University in East Lansing Mich.

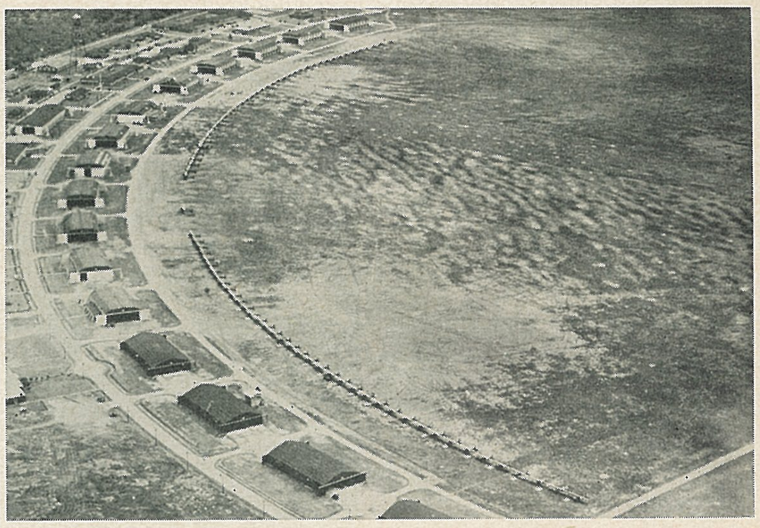
In presenting the award to Coggan, a graduate of the class of '39, Dr. John Hannah, president of MSU, said, "By your outstanding accomplishments in widely diversified fields you have reflected great honor upon your Alma Mater. In the name of Michigan State University, and all of its alumni, I present this award to you, and congratulate you upon being the first to be selected as having earned this special recognition from this great university of which you are a distinguished alumnus."

Prime Minister John G. Diefenbaker of Canada gave the commencement address for the 4,000 graduating seniors.

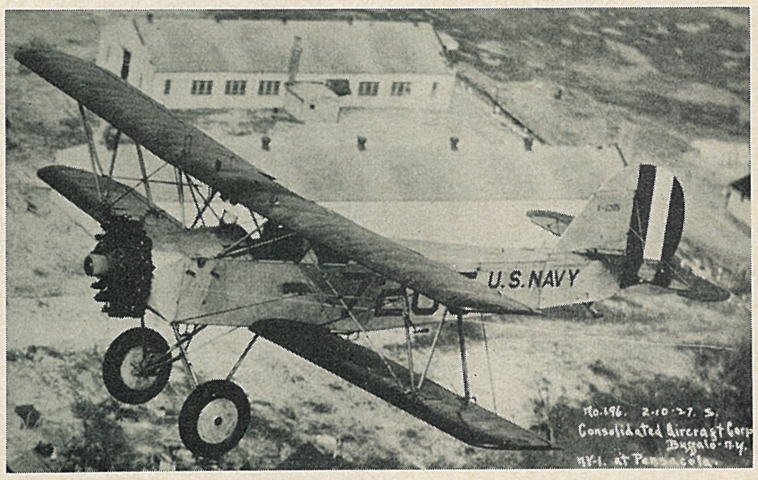
Convair SD, Astro Men Win Diplomas

Eight Convair SD and Astro men received their high school diplomas from the San Diego Evening High School at last week's commencement exercises.

San Diego Division employees graduating were Gerard E. Archambault, Talmadge A. Burks, and Raymond E. Clapper; while from Astronautics were Jesse E. Bodine, Jerry L. Dehner, Donald C. Forbes, Leokadja Gutowski, and Ides Joseph Romero.



A BATCH OF PT-1s—On line at Brook Field, Texas, in winter of 1927 were 72 Consolidated PT-1 trainers. Building these as well as trainers for Navy put money in bank for Consolidated Aircraft.



AT PENSACOLA—Not only Army was customer for Consolidated trainers in '20s but Navy, too. Company consistently won Navy competitions. This Navy plane was pictured at Pensacola in 1927.

Consolidated Forced by Army To Build 50 PTs for $1 Apiece

(This is No. 11 in continuing history of Convair, told in installments.)

It was in 1927 that the famous "Fifty Free Airplanes" incident took place.

Consolidated Aircraft had been doing a brisk and profitable business building trainers, profitable largely because of the foresight of the founder, Reuben H. Fleet. Confident that his trainer was the best and that the military would continue to buy, Fleet had gambled by ordering materials far in advance. He ordered enough to build 250 airplanes, even though at that time he did not have sales for them. The gamble paid off when the orders came in and the savings due to bulk orders of materials made possible a handsome profit.

By mid-1927 Consolidated showed a cumulative profit of $867,000 on the service trainers it had built since 1923. The Air Corps* asked to see the company's books (a privilege not yet granted by law) and followed up with a demand for $300,000 refund on excess profits.

Fleet and the directors felt the company had no alternative, since the services were their sole customer. Fleet negotiated one practical compromise which benefited customer and company alike, however. He pointed out that a $300,000 payment would vanish into the general fund of the U.S. Treasury. Maj. Gen. Mason M. Patrick, Air Corps chief, agreed to "take it out in trade" by letting Consolidated build 50 trainers, currently priced at $6,000 each, for a nominal charge of $1 each.

The Navy declined to join the Air Corps either in seeking the settlement or accepting its proportion (26 per cent) of the plane refunds. RAdm. W. A. Moffett, Bureau of Aeronautics chief, replied to Patrick in a memorandum dated Aug. 3, 1927: "The records of the Navy Department covering its transactions with Consolidated Aircraft Corp. show that all procurements from it have been subjected to competition in accordance with law. . . . It is evident that potential competitors put forth their best efforts to obtain this business. . . . The Navy Department is not in a position to question the profits that the company may have made."

Fleet was still protesting the justice of the settlement seven years later. In a 1934 communication to the House Naval Affairs Subcommittee, dealing with proposed regulatory legislation, he recalled the incident and said: "We took the gamble, the government did not; we should, therefore, have been entitled to the resultant savings, which would have made our profit approximately 23 per cent. . . . In 1931 and 1932 our losses to the Army put the 'shoe on the other foot,' and it would seem fair that the Army should reimburse us . . ."

Fleet's allusion was to losses totaling $375,157 that Consolidated suffered on Army contracts in 1931-1932. Had he been addressing the subcommittee a few years later he could have cited another loss, this time on Navy business.

"Of the 49 flying boats we have built for the Navy," Fleet wrote RAdm. Ernest J. King in 1936, "our audited books show a total net loss of $89,673.93, with sufficient profit on the 16 we built for others to enable us to keep going."

The "others" referred to commercial customers.

***The Army's aviation branch was born Aug. 1, 1907, as the Aeronautical Division of the Signal Corps. Name changes followed in this order: Aviation Section, Signal Corps (July 18, 1914); U.S. Army Air Service (May 20, 1918); U.S. Army Air Corps (July 2, 1926); U.S. Army Air Forces (June 20, 1941); U.S. Air Force (law signed July 26, 1947, with separation from Army effective Sept. 18 when W. Stuart Symington was sworn in as Air Force Secretary).**

SD's Salvage Yard To Close on July 4

Salvage yard at Convair San Diego Plant 1 will be closed on the July 4 holiday, reminded R. H. Lange, material sales supervisor.

The yard at Gate 5 will be open for employee sales the following Saturday during the usual 8 a.m. to 1 p.m. hours.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period June 16 through June 30.

Twenty-five-year: Dept. 14-8, Frank Cary; Dept. 101, W. J. Gramse.

Twenty-year: Dept. 6-51, G. A. Lemke; Dept. 8-1, M. C. Hangen; Dept. 180, E. E. Carpenter.

Fifteen-year: Dept. 1-65, J. D. Donaldson; Dept. 4-1, R. F. Mellon; Dept. 6, V. L. Booth, R. P. White, F. E. Wilson; Dept. 31, E. J. Babinec Jr.; Dept. 115, A. B. Clark; Dept. 149, C. O. Cooper; Dept. 171, W. A. Morris; Dept. 206, J. W. McCartney; Dept. 288-5, W. L. Blair, H. C. Ross; Dept. 407, G. A. Armstrong.

Ten-year: Dept. 1-31, Angela M. Venegas; Dept. 6, Joseph Haninchek, R. M. Kuhns, J. E. Piper, W. F. Presch, J. C. Ramsey; Dept. 14-1, C. A. Wadkins; Dept. 15-3, Marjorie K. Dickerson.

Dept. 25-9, David Knox; Dept. 31, W. C. Barnard, R. E. Bowden; Dept. 93-6, R. H. Knapp; Dept. 97-7, Eva S. Seasons; Dept. 102, R. B. Lowe; Dept. 115, S. T. Krebs; Dept. 120, Lois G. Caver, A. A. Paul.

Dept. 143, Voatress Mullen; Dept. 149, R. R. Johnson; Dept. 180, W. D. Bailey; Dept. 188-7, W. V. Peed; Dept. 216, Hazel H. Easton; Dept. 218, Kathryn C. Anderson, Agnes Y. Woodhead.

Dept. 231, Olive H. Merrill; Dept. 233, R. T. Renfro; Dept. 267, Mary F. Chavez, E. F. McCormick; Dept. 271-0, R. R. Mathews, G. F. Parker, H. P. Pinones; Dept. 279, R. O. Encinas; Dept. 288, Rose M. Darling, Florence J. Kuykendall; Dept. 400-1, C. J. Stevens; Dept. 600-1, G. R. Bradbury; Dept. 603-7, Leonard Lanner.

Promotions

SAN DIEGO

Promotions to or within supervision effective June 8.

Dept. 6, Engineering: To chief of dynamics lab, M. C. Brady.

Dept. 34-1, Material Procurement: To general purchasing agent, R. L. Donoghue.

Dept. 146, 880 Wing Primary and Wing Mate: To asst. foreman, J. D. Burt, M. M. McCaskey.

Retirements

SAN DIEGO

BLUDWORTH—J. G., Dept. 215. Seniority date Oct. 27, 1947, retirement effective June 1, 1959.

DUSHANE—S. P., Dept. 3-1. Seniority date March 17, 1952, retirement effective June 5, 1959.

GILGER—W. C., Dept. 407. Seniority date Sept. 12, 1950, retirement effective June 12, 1959.

RUSSETT—E. A., Dept. 25. Seniority date Jan. 25, 1956, retirement effective March 27, 1959.

SMITH—C. B., Dept. 31. Seniority date Nov. 17, 1942, retirement effective June 6, 1959.

WADSWORTH — Frances B., Dept. 407. Seniority date March 28, 1951, retirement effective June 12, 1959.

Personals

Our deepest appreciation to personnel in timekeeping, both Plants 1 and 2, and experimental departments for the kind expressions of sympathy when we lost our baby daughter, Marcelina.

Jess and Mary Estrada
(Depts. 31 and 93-8)

* * *

I wish to express my heartfelt appreciation to the Con-Trib-Club for the financial assistance given me during my long recuperation.

W. S. Williams, Dept. 188-1

* * *

To whom it may concern—I wish to express my sincere thanks for the return of my wallet on June 10.

Barney Byle, Dept. 44-2, Rose Canyon

Lost & Found

SAN DIEGO

LOST—Gruen watch in stainless steel case with steel expansion band. Left in washroom, Bldg. 39, Plant 1, Friday, June 12. Sentimental value. $10 reward for return to O. Holmberg, Dept. 14-5, ext. 754 or 2124, Plant 1.

FOUND—Yellow gold Masonic (Blue Lodge) ring on street side of Overpass, Plant 2. Owner may claim from R. M. East, Dept. 266, ext. 753 or 270.

Births

SAN DIEGO

CAZARES—Son, Ben H., 7 lbs., 8 oz., born May 17 to Mr. and Mrs. Benjamin Cazares Jr., Dept. 400-1.

JOHNSON—Daughter, Carrine Marie, 9 lbs.. 5 oz., born May 23 to Mr. and Mrs. Robert J. Johnson, Dept. 98-6.

JOHNSTON — Son, Robert Byron, 8 lbs., 6 oz., born March 4 to Mr. and Mrs. Robert E. Johnston, Dept. 6.

Deaths

SAN DIEGO

HONESS—Betty L., Dept. 600. Died June 18. Survivors include father, Harold R. Honess.

MacLEAN — George W., Dept. 603 Died June 14. Survived by wife, Charlotte; sons, George and John MacLean; daughter, Mrs. W. F. Felton; two sisters and one brother.

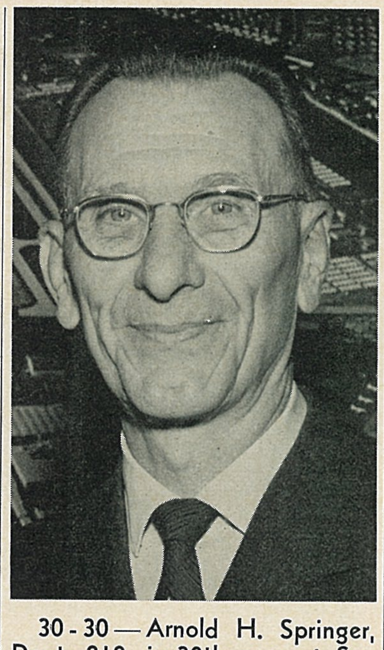
SCHMITT—Leo F., Dept. 231. Died June 15. Survived by wife, Elsie; four children, Carol, Kathryn, Cleo, and Kenneth; four brothers, one sister, and his parents.

Pecan Park Chosen For Jeep Clubbers

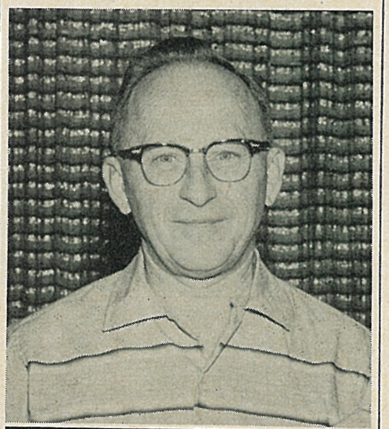
Members of the Convair SD Jeep Club will stage their annual picnic at Pecan Park July 12 starting at 2 p.m., Art Thomas, club director, reported.

No admission will be charged for members but guests will be assessed $1.50 which includes a barbecued hamburger dinner and refreshments.

Reservations can be made by contacting Thomas, preferably Wednesday evenings, 5-7 p.m., HI-4-1758.



30-30—Arnold H. Springer, Dept. 218, is 30th man at San Diego Division to receive 30-year service emblem. He received diamond ring as "gift of his choice" from San Diego Manager B. F. Coggan.





TWO MORE—San Diego's "Quarter Century Club" added two new members this month when C. F. Berger (top), Dept. 603-8, and F. J. O'Connor, Dept. 14-6, received 25-year service emblems.

CRA Discount Tickets:

The following discount tickets are, or will be, available through SD employee services outlets, Plants 1 and 2; Rose Canyon, office of Dorothy Kniffen, ext. 2239; Fordham St. building, Bessie Cooper, ext. 100:

DISNEYLAND — Magic Kingdom Club membership cards allowing purchase of discount tickets at park box office.

MARINELAND—Discount tickets available for all ages.

NORM'S GYM — Half-price memberships for men and women at Norm's Gym, 3461 Ingraham St.

PADRES BALL GAMES—Discount tickets to July 1 game available June 29.

SKATING DERBY — Discount tickets to roller skating derby nights (Thursdays) at San Diego Arena.

STAR-LIGHT OPERA — Reduced-price tickets to July 12 showing of L'il Abner on sale June 29.

SWIM NIGHT—Free tickets to Convair family night swim (July 11) at Mission Beach Plunge.

July 11 Date Set For Free Swimming

The July free swim night at the Mission Beach Plunge will be held the second Saturday (July 11) instead of the first Saturday because of the Fourth of July conflict.

Open to all Convair employees and their families, tickets are available at both employee services locations and from departmental representatives. Swimming hours are from 7-9:30 p.m.

Five SD Men On 'Big Shots'

Five Convair SD softball players have landed positions on the La Mesa Big Shots, an all-star team composed of the top 15 players in the San Diego area.

They are Dean Froggatte, catcher, (Dept. 25); Art Bunge, pitcher, (Dept. 15); Bill Doten, third baseman, (Dept. 192); Dick Fenton, outfielder, (Dept. 14) and John Hartsell, outfielder, (Dept. 400). John Murillo (Dept. 400) was also chosen to play on the all-star team but a sprained ankle has kept him out of action.

On June 13 in Long Beach the team played a doubleheader with the Nighthawks, a squad that in 1958 won the world's softball championship. The San Diego team won the first tilt 3-0 but dropped the second 1-0. Convair pitcher Art Bunge pitched shutout ball for 11 innings in the second game before the world softball champs drove a run across the plate. John Huffman, a former Convair SD pitcher, twirled the first game shutout.

The two teams will meet again this Saturday (June 27) at the Helix High School playground. Spectators are invited.

Exhibition Given By Chess Expert

Imre Konig, a chess player who holds the title of international master, gave an exhibition at Convair SD recently sponsored by the CRA Chess Club.

Konig played 37 games simultaneously against all comers, the last game ending after five hours of play. Of the 37 games Konig won 29, drew five and lost three. Newton Grant (Dept. 6) was the only Convair SD player to best the international master.

Results of round robin tourneys held by the club saw John Alexander and Tom Lux win the Sunday and Wednesday competitions, respectively, with identical scores of six wins and one draw.

Golf Club Meeting Scheduled July 9

The second quarterly meeting of the Convair Golf Club July 9 will feature the installation of new club officers and the presentation of awards to winners of the championship tourney.

Cocktails from 6:30-7:30 will be followed by a smorgasbord dinner at the Admiral Kidd Officer's Club on Harbor Drive.

Tickets for the event go on sale today (June 24) and will be available until July 6.

Reservations can be made with the following: H. V. Purnell, ext. 1313, Astro; J. B. Kenney, ext. 695, Astro; G. L. Dix, ext. 631, Plant 2; J. J. Swarts, ext. 456, Plant 2; F. W. Kelly, ext. 2141, Plant 1; C. W. Maxfield, ext. 694, Plant 1, and K. W. Wulfemeyer, ext. 1705, Plant 1.

Prices Are Reduced For Plane Pictures

Large colored prints of Convair planes are still available at SD employee services, Plant 1 and 2.

Packaged in sets of four, the 16x20-in. prints of the R3Y, T-29, F-102, and Convair-Liner 440, are selling at the reduced price of 25 cents a set.

Entries for Tennis Open Again at SD

Tennis registration at Convair SD will be reopened today (June 24), Gil Crosthwaite, commissioner, has announced.

Crosthwaite, at ext. 1245, Plant 1, said registrations will be taken for the next two weeks and if sufficient interest is indicated the club will hold a meeting in the near future to map plans for coming events.

As the future of the club hinges on the outcome of registrations received, Crosthwaite urged that all prospective players sign up as soon as possible.



IS IT YOURS?—Vale Vaughn of employee services at Convair SD sorts out articles in "lost and found" that is overflowing with unclaimed glasses, wallets, keys, etc. Articles can be claimed in Bldg. 32 office, Plant 1.

Economy Run, Open to All Cars, Will Be Sponsored by CRA Club

An "RX" Economy Run, open to all makes and types of cars, will be sponsored July 19 by the Convair SD Sports Car Club.

Eight classes, accommodating all cars from Fiats to Cadillacs, have been set up. The Economy Run, as the name suggests, is planned strictly on a miles-per-gallon basis. It will be a non-navigational event and the 175-mile course will be laid out over well-paved roads, not usually subject to heavy traffic.

A "fifth wheel" will be used to ascertain the exact distance of the course. The first car will leave the Astronautics parking lot at 9:01 a.m. However, contestants are asked to be there at least 45 minutes before their starting time so cars may be fueled and tanks sealed.

Peter Aperlo, ride master, said entries, which close on July 12, will be limited to 200 cars. To encourage early registration, plaques will be awarded the first 100 that sign up. Members of the Sports Car Club will be admitted free, others will be required to post a $1.50 entry fee. To register, contact Aperlo, ext. 1104, Plant 1.

Cars entered will be put in one of the following classes: under 750 cc. (sedans and sports cars); 750-1100 cc. (sedans and sports cars); 1100-1500 cc. (sports car only); 1100-1500 cc. (sedans only); 1500-2000 cc. (sports cars only); 1500-2000 cc. (sedans only); 2000-3000 cc. (both); over 3000 cc. (both).

Shop Softball Standings Tight As Fifth Week of Play Starts

A three-way tussle for first place was being waged in the American League last week while National League teams were still trying to figure out how to beat an undefeated Flite Test team as shop league softball entered its fifth week of activity.

In the American circuit Loft, Structures, and Planning had moved into a three-way tie for first place with identical records of four and one. In the last two weeks Structures gave Planning their only loss 1-0 and clipped Experimental in a slugfest 11-10.

Planning bounced back from its earlier defeat to wallop Rose Canyon 12-4. Experimental did an about-face and dealt the undefeated Loft squad its first loss 9-8.

Over in the American League, Flite Test was still cruising along undefeated, sporting four wins in the victory column. Mockup was lodged in second with three wins and a lone defeat while both Plant Engineering and Tooling were tied for third with records of two wins, a loss and a tie. To retain its first place prominence Flite Test steamrollered 106 Wing 16-3 and shut out 880 Fuselage 4-0.

★ ★ ★

Two Convair SD teams entered in a city swing-shift league that started play last week got off to fast starts.

Dept. 6-31, behind the one-hit pitching gem thrown by Jim Blackwell, beat the Fourth Ave. Toppers 3-0. Blackwell retired 21 of the 22 batters he faced. His teammates combined three singles and a double in a sixth inning uprising to provide the margin of victory.

Dept. 280 drilled hits all over the field in their league opener to bury a Rohr team 21-1.

SIX WIN FISHING PRIZES FOR MONTH

Barracuda and yellowtail catches took five of the six prizes awarded by the Convair SD Fishing Club for the month of May.

Topping the list was a 10-lb., 2-oz. barracuda caught by Lynn L. Schultz (Dept. 31). R. W. Allen (Dept. 6) and Fred Schoolcraft (Dept. 3-1) placed second and third with yellowtail catches of 27 lbs., 8 oz. and 26 lbs., 12 oz., respectively.

W. C. Bowen's (Dept. 188) 8-lb., 1-oz. barracuda won the fourth prize. Tillie Sopko (Dept. 25) landed a 15-in. rainbow trout to rank fifth and L. M. Guess (Dept. 192) was sixth with a 22-lb. yellowtail.

Schultz, Allen, Schoolcraft, Guess and Bowen were also winners of button awards.

Beach Breakfast Set for Ski Club

Water skiers at Convair SD will breakfast on the beach at 7 a.m. on the Fourth of July, then ski until noon, T. E. Mathews, commissioner, said last week.

The beach area chosen is south of the Bahia Motel off Gleason Point and adjacent to the swimming lagoon.

Astro Air Tour Open To SD Division

Astronautics CRA this week extended a special invitation to all San Diego Division employees to take part in a special two-week group European tour. Departure is Aug. 22.

Astro employees have filled approximately 50 of the 79 available seats for the flight.

To acquaint employees with details a special meeting has been set for 7:30 p.m. July 6 at the Astro cafeteria. Entrance is via a gate at the southwest corner of the cafeteria.

A package deal involving air fare and tour is $629, including meals, hotels, travel and guides. Air fare only is $449.

All details concerning the trip are being handled by Astro CRA. Questions must be referred to Elaine, ext. 1111, at Astronautics.

Golf Lessons Slated Again

Reservations for the first series of bargain-rate golf classes were filled so fast that additional sessions have been scheduled for Convair SD employees and members of their families.

They will again be slated for Mission Valley Country Club starting July 14 and 16 and continue for six weeks. Classes will be held at 5 and 6 p.m. both days.

However, only 10 students will be allowed in each class. Registration will be on a first-come, first-served basis. Total cost for the six one-hour lessons is $10. This fee must be paid upon registration.

To enroll contact employee services office, ext. 1705, Plant 1. Instructors will include three pros at each class from Mission Valley CC's regular staff of professionals.

Entries Open Today For SD Golf Sweeps

Registration for the next CRA golf sweeps to be held at Balboa July 11-12 opens today (June 24). Ken Wulfemeyer, commissioner, said deadline for entries will be July 8. They can be made by calling ext. 1705, Plant 1.

The final round of the inter-division golf matches will be played June 27-28 at Circle R. Astro and San Diego golfers tied last month at the halfway point of the tourney with 1,043 strokes. Convair Pomona was ranked third.

Shuffleboard Big Sport in Bldg. 3

A total of 120 men entered in shuffleboard doubles competition in Bldg. 3, Plant 1, ended play June 11, CRA representative, Gary Kelly (Dept. 160), reported.

Departments entered in the tournament, which was played for the most part during lunch hours, included 15, 129, 135, 136, 138, 148 and 160. Ranked in first place after the two-week tourney were Frank Givens (Dept. 138) and Mel Barnhart (Dept. 135). Jay Brett and Fred Brown (both Dept. 180) placed second.

CRA presented both the winning team and runners-up with trophies. Sixty-five players have entered a singles shuffleboard tourney which started last Thursday (June 18).

CRA *Sports & Recreation* Convairiety

Convair Teams Leading San Diego City League

Convair vs. Convair.

That's the story in the San Diego AAA league where only percentage points separate the first-place Convair Eagles and the second-ranked Convair "A" team.

The Eagles last week had won seven and lost one; the "A" team was sporting a six and one record.

The pattern of victory for both teams thus far has been similar. Both teams scramble for runs while pitchers Art Bunge of the "A" team and Bob Miller of the Eagles handcuff opposing batsmen.

Anderson's Furniture, currently ranked third in the league, flailed away helplessly for seven innings last week while pitcher Art Bunge scattered two hits and waited for his teammates to pick up a run. They finally combined a walk, a hit batsman, a double steal and a sacrifice fly into the winning tally. Final score: 1-0, Convair's favor.

Earlier in the week, Eagles' pitcher Bob Miller limited Ek and Ek Plasterers to one run (unearned) while Al Hooper unraveled a long circuit clout, driving in Curtis James ahead of himself in the sixth inning to give the Eagles the winning runs in a 3-1 ball game.

Bunge is undefeated in league competition. Miller's record is marred only by a 4-3 loss dealt the Eagles by the "A" team.

Other games during the past two weeks were also close calls for both Convair teams. The Eagles clipped Rohr 1-0 and the "A" team tripped up a Quaff Barrel squad 4-3.

Car Clubbers To Hit Beach

Sports Car Clubbers at Convair SD will park their cars June 27 and take to the boats.

Luau plans formerly announced have been cancelled and the club will instead stage a combination hot dog roast and beach party June 27 starting at 1 p.m. on Tierra del Fuego on Mission Bay.

Club signs will point the way to the beach location. Water skiing, swimming and boating are planned. A $1 admission fee will be charged for the event that includes wieners, buns, corn, marshmallows, etc.

Plans are already being laid for the San Diego Council event, a field day on Aug 9. Event will include gymkhana, slalom and time trials with over 150 cars expected to enter.

The next club meeting will be held July 1 at 7:30 p.m. in the Museum of Natural History, Balboa Park.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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AEROMODELERS — Flying competition July 5, 8:30 a.m., Clairemont-Mesa Field.

ART CLUB — Life drawing classes each Tuesday, 7 p.m., Convair studios, Spanish Village, Balboa Park. Register with Gil Crosthwaite, ext. 1245, Plant 1.

BADMINTON — Play discontinued in Federal Bldg. until mid-July.

BOWLING—Replacements and substitutes needed for summer leagues. Contact Jim Hayman, ext. 1155, Plant 1.

BRIDGE — Sessions June 30 and July 7, 7:30 p.m., Barcelona Hotel, 4th and Juniper Sts.

CAMERA CLUB — Workshop and guest speaker July 13, 7:30 p.m., Photo Arts Bldg., Balboa Park.

GLIDER CLUB — Meets every Saturday and Sunday at 10 a.m., Torrey Pines Gliderport.

GOLF—Call ext. 1705, Plant 1 to register for July 11-12 sweeps at Balboa and for bargain-rate golf classes to start July 14 and 16 at Mission Valley Country Club. Convair Golf Club: Reservations now being taken for quarterly meeting at 6:30 p.m. July 9, Admiral Kidd Officer's Club.

JEEP CLUB — Annual picnic July 12 at Pecan Park, starts 2 p.m.

MOVIES — Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admission: adults 25c; children, 10c.

PISTOL CLUB — IRC shoot, San Diego Police Pistol Range, June 28, 9 a.m.

RADIO CLUB — Meeting at 8 p.m. tomorrow (June 25) at Harbor Drive headquarters.

SPORTS CAR CLUB—Entries open for "RX" Economy Run July 19. Call ext. 1104, Plant 1. Beach party 1 p.m. June 27, Tierra del Fuego on Mission Bay. Meeting July 1, 7:30 p.m., Natural History Museum, Balboa Park.

SQUARE DANCING — Party night June 27, 8 p.m., University Heights Community Center, 4044 Idaho St. Picnic at Pecan Park June 28, starting 1:30 p.m.

SWIMMING—Next free swim night Saturday (July 11), 7-9:30 p.m., Mission Beach Plunge.

TENNIS CLUB—Registrations for club now open. Contact Gil Crosthwaite, ext. 1245, Plant 1.

WATER SKI CLUB—Outing 7 a.m. on Fourth of July off Gleason Point. Potluck supper and meeting, CRA Clubhouse, Gillespie Field, 6 p.m., July 7.



TOP TWO—First place and runner-up teams in shuffleboard play in Bldg. 3, Plant 1, last week were given trophies by CRA representative Gary Kelly. A total of 120 competed in the in-plant tourney. Standing (from left): Mel Barnhart (Dept. 135); Kelly (Dept. 160); Jay Brett (Dept. 180). Kneeling (from left): Frank Givens (Dept. 138) and Fred Brown (Dept. 180).





IRC WINNERS—SD and Astro shooters combined forces to lead way in IRC tourney hosted by CRA Gun Club at Gillespie Field. Members of first-place skeet team (above, from left) are: Dick Tarver, Wayne Eddington, C. W. "Red" Pharis, Leo Bernitz and George Skurla. Below are members of rifle team that ranked second in shoot: Bob Saether, Joe Williamson, Rod Cherry, and Harold Schnaubelt.

SD, Astro Shooters Win First, Three Seconds in IRC Tourney

Convair teams, representing SD, Astro and Antelope Valley, won just about everything worth winning in the sixth annual Industrial Recreation Shoot.

Combined teams flying the colors of SD and Astro shot their way into first place in the skeet event and piled up additional honors by placing second in all three shoot categories — rifle, skeet and trap.

Another Convair contingent from Antelope Valley that journeyed to San Diego for the shoot won the trap event.

The only non-Convair team to break into the winner's circle was shooting under the auspices of Rohr Aircraft.

The closest competition of the day centered around the trap teams from Antelope Valley and Convair SD. The visiting team edged the local trap shooters by two points, scoring 118 to the latter's 116.

The Antelope Valley team was composed of Bill Reid, Bill Hawkins, Donn Walsh, Bill Hanks and Fred Smith. Representing SD and Astro in the trap event were Blas Vargas, George Anderson, W. U. Gatterman, Jack Swank and E. L. "Doc" Barnett.

Competition in the skeet event was also predominantly between two Convair teams. Members of the first-place quintet from SD and Astro were Wayne Eddington, Dick Tarver, George Skurla, Leo Bernitz and C. W. "Red" Pharis.

Their total of 119 points edged another combined SD-Astro team by 12 points. Scoring 107 points, good for second place honors in the skeet category, were Vince Cernuto, Wally Silva, Al Stroing, Bob Petro and John Stewart.

Placing second in the rifle competition, behind the Rohr team, was a SD-Astro squad composed of Bob Saether, Joe Williamson, Rod Cherry, and Harold Schnaubelt.

Some Summer Keg Spots Now Open

Some openings, mostly for alternates and substitutes, are still available in Convair SD summer bowling leagues, Jim Hayman, commissioner, said last week.

In a few cases bowlers are needed to fill vacancies left by keglers who have transferred shifts. Replacements interested in getting into the summer leagues should contact Hayman, ext. 1155, Plant 1, or Mike Brooks, ext. 583, Plant 2.

Discount Available For Park Musicals

Employee services at Convair SD will handle discount tickets for Convair SD folk and their families for the first Sunday performance of each of the five Broadway musicals to be presented by the Star-Light Opera in the Balboa Park Bowl.

The regular $3.00 reserved seat tickets will be available for $2.10. Tickets for the July 12 performance of "Li'l Abner" will go on sale next Monday (June 29) at the employee services offices.

Convair nights for the other musicals are: "Carousel," July 26; "Where's Charley?," Aug. 9; "Naughty Marietta," Aug. 23; and "Bells Are Ringing," Sept. 6. Tickets for the plays will usually go on sale, at the same discount rate, approximately two weeks prior to the Convair night.

15 DELTA DIVERS GO ON CORONADO OUTING

Fifteen Delta Divers from Convair SD early this month attended an outing to the Coronado Islands, catching many small fish but none of the larger variety in muddy waters.

At last night's meeting a new slate of officers was elected by the club, Tom Richardson, commissioner, reported.

Quiet 'Nests' Prepared For 880 Passengers

Passengers aboard Convair 880s will be riding in "nests" of "cotton" padding when the jet transports go into actual service next year.

Over 1,000 pieces of fiber glass, of all shapes and sizes, are being tucked into the interior of each 880 to protect passengers from noise generated by engines and other of the plane's operating systems.

More than 600 different shapes of fiber glass batts wrapped and stitched into plastic fabric covers are clipped to the plane's frames and laced in with nylon cording. The pieces range in thickness from one to four inches, and in size from six inches square to the large 14-ft. long by 20-in. wide pieces that are shaped to fit around each of the 88 windows.



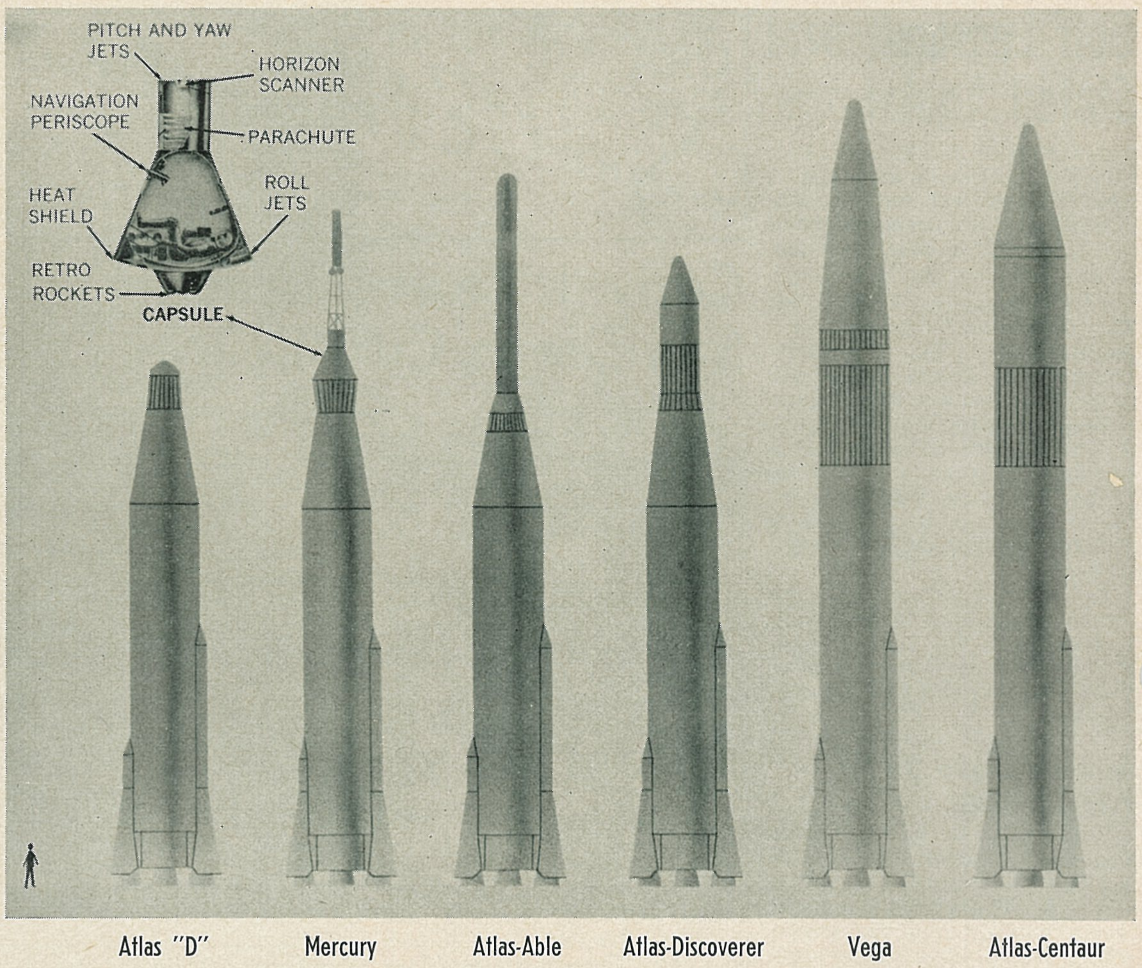
880 "PADDING"—From left, Dorothy McEwen, Bee Farmer, and Mary Lou Samarron, all of Convair SD Dept. 138, fit fiber glass sound-proofing material into 11th forward fuselage section.

The sound-proofing material is installed in each major section of the 880—the forward nose fuselage, tail, overwing barrel—as they are being built. Depts. 138, 139, and 146 are each responsible for the installation of each section's sound-proofing before they go into mating. The joints between the sections are sound proofed after mating by Dept. 148 in major mate.

"We find, in our department, that women are better at fitting in the sound-proofing pieces than men," said C. M. Bradley, Dept. 138 foreman. "The girls are experts at installing the numerous shapes and sizes of batts and lacing them securely into the proper places."

Fiber glass pads are placed between the skin and any installations to go into the plane before the structural tie-ins are made. For instance, in the forward fuselage, specially-shaped batts are laced into locations to serve as backings for the radio rack, electric rack, flight engineer's panel, and underneath the cargo floor.

Four vendors supply the fiber glass sound-proofing material, cut to shape and fitted to Convair SD's specifications—H. I. Thompson Fiber Glass Co., Seaman Products, En-Fab Co., and Johns Manville Co. Any alterations made necessary by change in engineering design are made in Convair SD's tubing and fabric department.



Atlas, Space Age Wheelhorse, to Power Five Different Exploration Projects

A real "Sunday punch" in the field of space explorations is being readied by Convair in the form of five members of the Air Force Atlas "family" of space vehicles.

Each of these has been assigned a specific task. And each has a common trait in that the Atlas ICBM, now in production, provides the initial or booster power thrust to send it along its journey toward space.

Convair Astronautics, builder of the Atlas, is now at work on all five programs.

Actually, it can be said this Atlas family contains six members, rather than five. The Atlas has already proven its ability to boost itself into orbit without the use of additional rocket stages.

(Astro has outlined a proposed Project Outpost which would utilize this trait. An empty Atlas tank in orbit would be outfitted for living and working quarters for men who would conduct preliminary studies of life in space.)

There is little doubt that the Atlas is slated to become the wheelhorse of the early space age, due largely to its connection with the Convair family of space vehicles. At least four "firsts" are now slated for the Atlas space vehicles.

One first, quick to capture the imagination of all, is Project Mercury (Atlas/Mercury), the program to put the first manned U.S. satellite in orbit.

It consists of a capsule (McDonnell Aircraft) roughly conical in shape, approximately seven feet across the base and 10 feet high. Atlas will boost the capsule into orbit at an altitude of 100 to 150 miles for up to 24 hours. Retarding rockets and parachutes will enable the capsule to return to earth after that period.

Vega is a multi-stage rocket slated to become the first U.S. space vehicle in the "medium energy" class. Coupled with Atlas will be a second stage, also Convair-built; and a third stage provided by Jet Propulsion Laboratory. Vega will be able to put a 5,800-lb. weather satellite in orbit 300 miles above the earth or to send a half-ton payload to the moon. Vega also could put a 740-lb. experimental communication relay into the 22,000-mile or "24-hour" orbit.

Project Centaur (Atlas/Centaur) will become the first U.S. space vehicle in the "high energy" class.

As such it will be capable initially of putting five-ton payloads into satellite orbit or sending 2,000-lb. payloads to the moon. Centaur is made up of an Atlas, plus a Convair-built upper stage of the Atlas type. The upper stage uses the first U.S. liquid hydrogen rocket engine (Pratt & Whitney). If needed, a third stage (similar to Vega's) can be adapted for additional capabilities.

Project Discoverer (Atlas/Discoverer) will orbit instrumented payloads in polar orbit. It involves an Atlas booster, plus a second stage being built by Lockheed Aircraft.

Atlas/Able 4 consists of an Atlas booster, plus four additional stages to be fired into interplanetary space.

Atlas boosters for Vega and Centaur are being modified by building tankage sections a uniform 10 feet in diameter in lieu of tapered forward ends, as used with the ballistic missile.

Convair FW Men IRE Officers

Three Convair Fort Worth men were elected to key positions in the Fort Worth section of Institute of Radio Engineers this month.

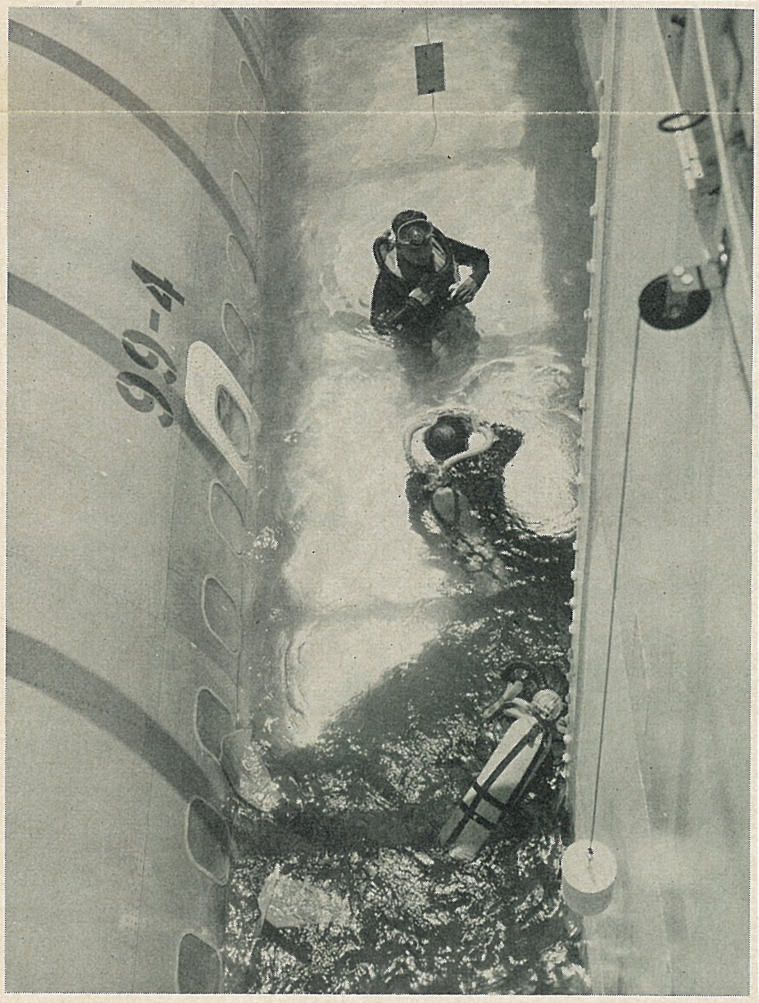
Named were: Graham H. Robertson, chairman; Felix Quirino, vice chairman; and W. D. Raymond, secretary-treasurer. All are in Dept. 6.

At the final meeting June 5 at Ridglea Country Club, Jorman I. Koski, 1959 chairman, commended members for their work in forming two new professional group chapters.

Mel Gordon and Quirino were instrumental in organizing chapters in reliability and quality control and radio frequency interference. The latter is the first of its kind in the United States.

Association to Hear SD Patent Attorney

Robert O. Richardson, Convair patent attorney, will address the San Diego Patent Law Association tomorrow night (June 25). With slides and recording tape as aids he will trace the history of a patent application through the U.S. Patent Office from rejection by the examiner and Board of Appeals to a favorable decision by the U.S. Court of Customs and Patent Appeals.



SUBMERGED—Convair 880 fuselage goes under water in giant hydrostatic test tank at SD seaplane ramp as pressure cycling begins to test wear and tear equal to 50,000 flights. Divers will evaluate damage during testing.

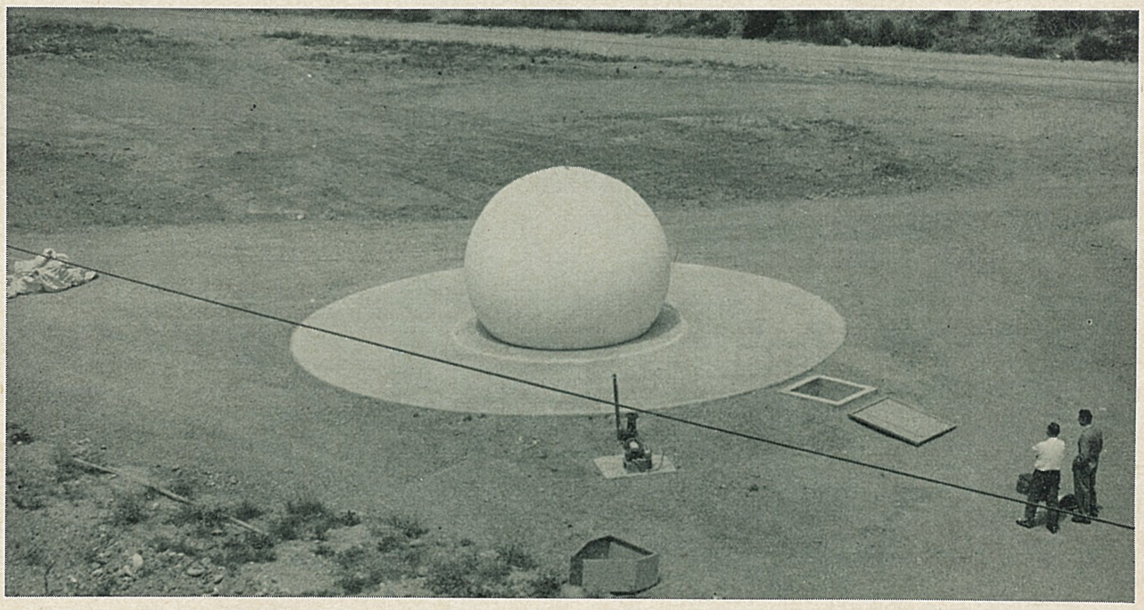
'Balloon' Antenna Assemblies To Serve Detection System

Huge balloon-like objects are being tested by Convair SD electronics section as part of its responsibility in furnishing antenna assemblies for an Air Force detection system.

Convair San Diego is acting as subcontractor for its sister division of General Dynamics Corporation, Stromberg-Carlson, in the design and development of 15 assemblies for the Rome Air Development Center, Rome, N. Y. The project is known as GPERF

The assembly consists of antennas housed in air-inflated radomes which are bolted to steel towers. The large radomes, looking like flat-bottomed balloons, are made of dacron coated with Hypalon, a synthetic-type rubber sizing. They range in size from over 11 ft. to 44 ft. in diameter.

The towers and antennas are being built in the Convair SD plant while Muehleisen Mfg. Co. of San Diego is constructing the radomes.



LISTENING POSTS—Huge 160-in. balloon-like radome, part of detection system being developed by Convair SD for Stromberg-Carlson, being inflated for testing. Convair San Diego men responsible for radome design are Dalton Bell and R. W. Quint of electronics section (Dept. 6-70).

Published every other Wednesday.

Convair Division of General Dynamics Corporation.

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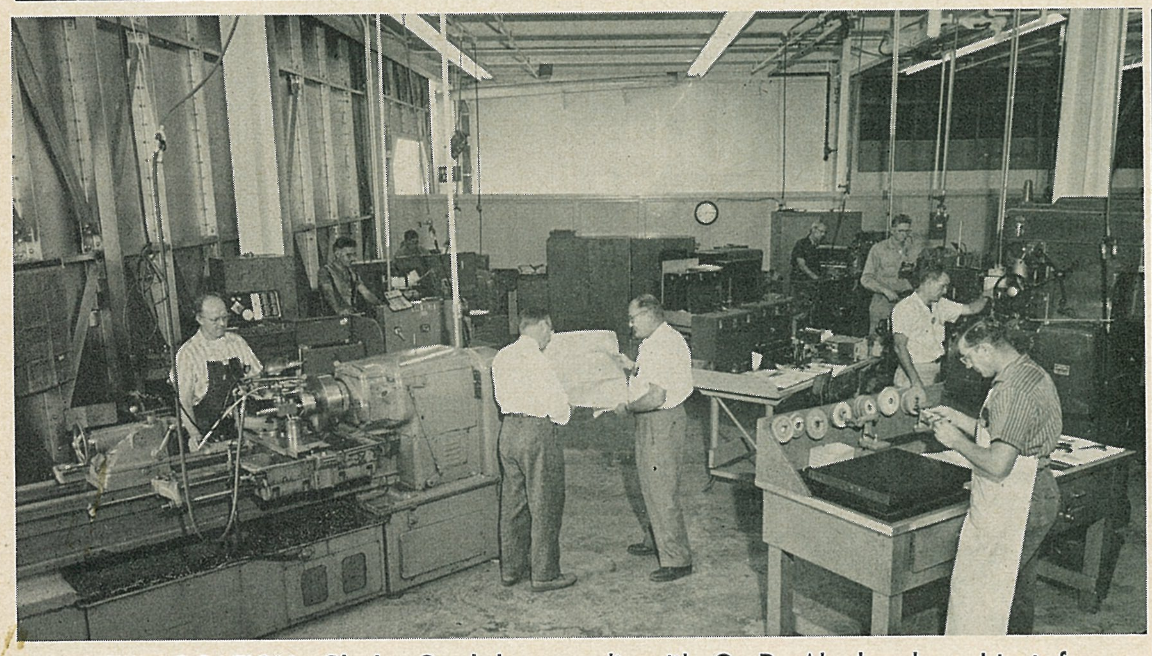
San Diego EDITION

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Vol. 12, No. 14 Wednesday, July 8, 1959

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



IN NEW LOCATION—Charles Overhulser consults with G. D. Alumbaugh, assistant foreman (center), in new electronics manufacturing area now located in Bldg. 4, Plant 1, at Convair San Diego. Machinery of electro-mechanical fabrication and assembly function was first to make move into new quarters.

New Quarters Now Occupied By Electronics

Electronics manufacturing at Convair San Diego has been centralized in new quarters on the lower floor of Bldg. 4, Plant 1, as of last week.

"Expansion of our electronics production capabilities was necessitated not only to meet present committed electronics work, but to provide an integrated manufacturing facility with room for future expansion," explained R. E. Honer, assistant chief engineer-electronics.

So far, this year's electronics activities in the production of airborne and ground-based radar systems, data acquisition handling systems, and ground support equipment has surpassed last year's by over 50 per cent in dollar value, he said.

E. W. Carlson, who is responsible for electronics manufacturing operations at Convair SD, forecast a buildup of personnel which would double the number engaged in the work by the end of August. At present there are about 300 persons engaged in electronic manufacturing throughout SD Division. Of these, 150 have been relocated in the new Bldg. 4 area.

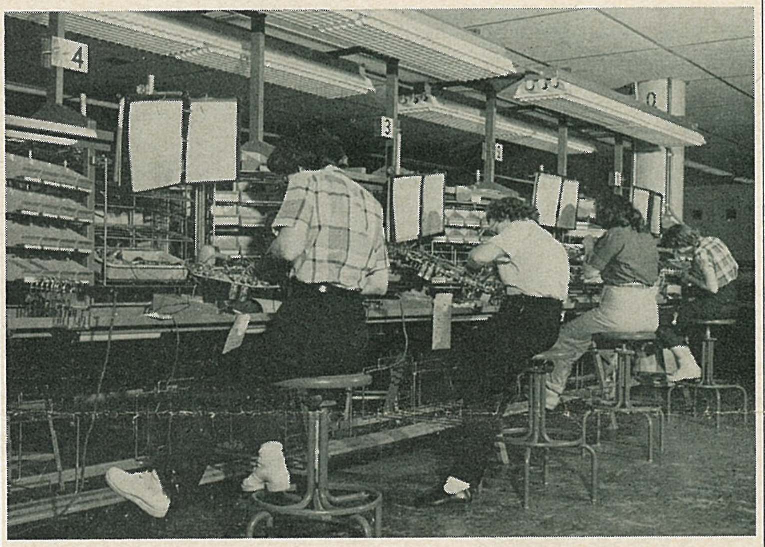
Approximately 40,000 sq. ft. of space in Bldg. 4 will be converted to electronics manufacturing and related administrative offices by 1960, said Carlson. Manufacturing operations are now occupying 13,800 sq. ft. along the east side of the building, increasing to 20,000 sq. ft. by the end of August. Half of this additional space will be on the second floor for offices.

Electro-mechanical fabrication and assembly under W. S. Childs began the move into Bldg. 4 the last of June from former locations in experimental department in Bldg. 5. Last week they were joined by personnel of electronics fabrication and test, under B. L. Shaw, from their former location on the northwest mezzanine of Bldg. 1.

Test equipment control group, although a part of the electronics manufacturing organization, including 48 persons reporting to H. G. Brown, will remain permanently in Bldg. 51.

IAS Members at SD Plan Evening Cruise

Convair SD members of the San Diego Section of the Institute of Aeronautical Sciences will join other IAS members at the annual summer dance this Saturday (July 11) aboard the M.V. Marietta.



MOVED—Electronics fabrication and test function has now joined other electronics production operations in east side of Bldg. 4, SD Plant 1. Arrangement of units follows same pattern as pictured in central section of new area.

$5,000 in 'RX' Prize Cash Remains To Be Paid Out

Ideas are still worth their "weight" in gold at Convair SD with $5,000 yet to be awarded for the best proposals submitted in the "RX" campaign.

"RX" researchers now are busy evaluating the suggestions submitted during June and hope to have the results available in the July 22 issue of **Convairiety**. The monthly awards will again total $1,500.

The same amount will be given for the best proposals submitted during July. In addition the eight winners (including those of April and May) will be in the running for the $2,000 Grand Prize.

The winners of the May awards, Hugo Kayes (Dept. 91) and Ralph De Sola (Dept. 6), were given checks for $500 and $1,000, respectively, at a management conference in the cafeteria June 24.

They join the April winners Don W. Kennedy (Dept. 116) and G. E. Trimlett (Dept. 6). Savings to Convair from the four winning monthly proposals are in excess of $200,000.

"With only 23 more days remaining during this last month of the campaign I urge all Convair San Diego personnel to make another concentrated effort to come up with more cost-cutting ideas," B. F. Coggan, SD Division manager, said.

(Continued on Page 2)



"RX" WINNERS—Hugo Kayes (left), winner of $500 "RX" award for May, and Ralph De Sola, recipient of May $1,000 prize, drop "winning" suggestions in box outside Division Manager B. F. Coggan's office. "RX" drive is now in last month at Convair SD.

Convair Response To Hospital Plea Praised by Naish

The "outstanding" response of Convair SD and Astronautics personnel to the Tri-Hospital appeal was praised this week by Convair President J. V. Naish and campaign officials.

"Every Convair employee who has helped make the in-plant drive a success is to be commended," Naish said. "As the first group to be solicited for funds in San Diego, much of the responsibility for the initial success of the drive rested with us. Your wholehearted support in meeting the challenge is gratifying.

"We have met the goal originally set for us," Naish added. "Total contributions from Convair San Diego and Astronautics are expected to total $1½ million during the next three years."

Convair's "community spirit" was also praised by Milton F. Filius Jr., campaign chairman of the Tri-Hospital Fund Drive. He said that through the excellent support of Convair personnel "we have been given a standard and inspiration that cannot be overemphasized."

Filius was joined in his praise of the Convair pledges by Julian L. "Jack" Ashe, Grand Lodge representative of the International Association of Machinists, District 50.

"The program as conducted at Convair is a good example of the teamwork that can be accomplished through cooperative effort," Ashe said.

For the most part, active solicitation at Convair SD and Astronautics has halted. However, new employees and those who have been on vacation will be given an opportunity to sign up. Employee services at both SD and Astro will have tab cards available on request.

Latest figures, estimated over a three-year period, indicate that Astronautics will contribute $625,246 to the hospital drive. Convair SD contributions are expected to total $890,000.

The percentage of participation at Astro this week stands at 73 per cent; at Convair SD the figure is 65 per cent. Dick Mitchell, Astro campaign chairman, and J. K. Field, Convair SD campaign chairman, were optimistic that the figures would rise slightly as late returns continue to trickle in.

In-plant solicitation is now being conducted in other San Diego industries, including Rohr Aircraft Corp., Solar Aircraft Co., Narmco, Kin Tel and Cubic Corp.

A total of $10½ million is being sought to add 442 beds and other hospital facilities to the city's three major voluntary hospitals—Mercy, Scripps and Sharp.

PLANT 1 REQUESTED TO EQUAL PLANT 2 BLOOD DONATIONS

All Plant 1 people on first shift at Convair San Diego will have a chance to sign up for the next bloodmobile visit scheduled for July 23.

Cards will be in the hands of supervisors by next Monday (July 13), said Ken Wulfemeyer of employee services, who urged Plant 1 donors to equal the record of Plant 2 at the last bloodmobile.

If as many pints of blood are collected this month as the 118 donated by Plant 2 on June 25, Convair SD's credit at the San Diego Blood Bank will be enough to carry through another month, said Wulfemeyer.

New Buildings To Ease Astro's Space Problem

Convair Astronautics has begun to occupy the second of three major expansion projects designed to provide more working space for a rapidly-expanding "population."

Now being pressed into use is Bldg. 26, a new structure located north of the factory building.

First equipment installations were made about June 29. Completion of installations and activation is due soon.

Over 100 employees will ultimately work there in the template shop, plastics and plaster shop, wood pattern shop and maintenance wood mill.

Areas vacated by these groups will be used in various ways. The former plastics and plaster shop will be taken over by manufacturing development and Dept. 756 (engineering test support); the former wood mill space will allow for expansion of garage facilities; and Bldg. 10, former home of the wood pattern shop, is slated for removal to a temporary storage area east of the factory building.

Already in use at Astro is a factory mezzanine expansion, which extended the original mezzanine from about the center of the factory building to the east wall in the high bay area.

Around July 25, Astronautics groups will begin to move into the new two-story office building (Bldg. 27) under construction on the west side of the reservation.

Once this move is started, it will continue on a seven day per week basis until approximately Sept. 1. In addition to employees moving into the new building (mostly engineering and product support), hundreds of others will begin shuffling about as other office areas are revamped, expanded and put into use.

Countess Will Tell War Experiences as Espionage Operator

Countess Maria Pulaski, a Polish noblewoman who was a World War II espionage agent for Great Britain, will be the featured speaker at the July 22 meeting of the Convair SD Management Club.

Members can obtain tickets for the affair through the usual departmental outlets. The program, sponsored by industrial relations, starts with a social hour at 5:30 p.m. in the Caribbean Room of the El Cortez Hotel.

Countess Pulaski, who is a resident of Chicago, is on the coast as a technical adviser for a film which will depict her life. She will recount her undercover activities for the Management Club audience.

Also on the program will be the presentation of the Mug of the Month and MacSave-it awards.



GRADUATION—Pauline Nates (Dept. 342 Astro) ranked in top ten of students who received certificates upon completion of basic manufacturing methods course sponsored by material office. Making presentation is T. J. Sullivan, SD assistant division manager.

110 Win Certificates on Completion Of Basic Mfg. Methods Course

A total of 110 from Convair SD and Astro June 17 received certificates upon successfully completing the basic manufacturing methods course. Presentations were made by T. J. Sullivan, Convair SD assistant division manager.

The course, designed to familiarize personnel with the different processes and methods employed in the manufacture of airframe components, is accredited by San Diego Junior College. It is sponsored by SD material department in conjunction with educational services.

Course instructor, R. W. Hardy, SD material services assistant supervisor, said the class, the third to take the course, was by far the largest, and brought the total for all three classes to 150.

Eighty-one of the certificate winners of June 17 completed both semesters of the course while 33 finished the second.

The course deals with raw materials, structures, unusual methods of manufacture such as chemical milling, Scotchweld bonding, as well as orthodox machine shop, sheet metal and safety procedure.

Hardy said the course would be held again in September.

New Bus Schedules Affect SD Plants

New bus schedules are going up at Convair San Diego plants and off-site points serviced by company buses.

First of the large directory-type schedules, all glass enclosed, has been mounted on Bldg. 13 at Plant 1 giving leaving times during the day to other sites.

Within the near future, said B. R. Hisaw, chief of SD transportation operations, the permanent schedules will be placed at approximately 20 points at Plant 1, Plant 2, Rose Canyon, Model 8 Flyaway Facility (gun butts), Ramp, Rosecrans Warehouse, and Fordham St.

SD Photo Lab Plans Pictorial Exhibit

Photographers of Convair SD photo lab are busy setting up shots of their own for a pictorial display to go on exhibit at the Los Angeles County Fair this fall.

Pictures selected for their portrayal of the close relationship of still photography to engineering, and solution of its problems, will be arranged on a 4x8-ft. panel for entry in the Society of Photographic Scientists and Engineers exhibit. Convair SD's display will be shown among those of other major industrial concerns in the Southern California chapter of the organization.

Representing Convair in the SPSE are W. G. Kemmer, photography supervisor; M. H. Miller and D. H. Otto, still photo assistant supervisors.

Virginia Rubottom Presents Recital

Virginia Rubottom, daughter of H. W. Rubottom, chief of Convair SD educational services, and a talented pianist, presented her first recital in San Diego June 21 since her return from London. She has been studying this season at the Royal Academy of Music there, and, at age 18, is acknowledged as an outstanding musician.

Wills to Head Omaha Office

Ross C. Wills, for the last year assistant manager of Convair's Dayton office, July 1 was appointed manager of Convair's Omaha office, T. G. Lanphier Jr., vice president and assistant to the president, announced.

Wills was appointed to the job vacated early in March by the death of Gordon Graff, Omaha manager since October, 1954. In the interim, Lester K. Murray, manager of Convair's office at Colorado Springs, Colo., has assumed additional duties as acting manager of the Dayton office. Murray now will devote full time to the Colorado Springs office.

At Omaha, Wills will be assisted by Paul R. Hurley, who will continue as Omaha representative for Convair, a job he has held for 18 months.

Wills, 36, has been with Convair since February, 1950, first working more than five years as a thermodynamicist for Convair San Diego.

Noted Mathematics Expert Will Speak

Dr. Norbert Wiener, one of the world's ranking mathematicians, will speak in San Diego during the week of July 20, under the sponsorship of the University of California Extension.

Educational services offices, Plants 1 and 2, and engineering will handle tickets for the event. Special announcements will be posted on bulletin boards this week in the plant regarding time, place and date.

Dr. Wiener is an exceptional linguist, philosopher and literary scholar. He is currently professor of mathematics at Massachusetts Institute of Technology. His most recent work has been with the mathematical study of random and rhythmical patterns as they apply to engineering, physics and other fields.

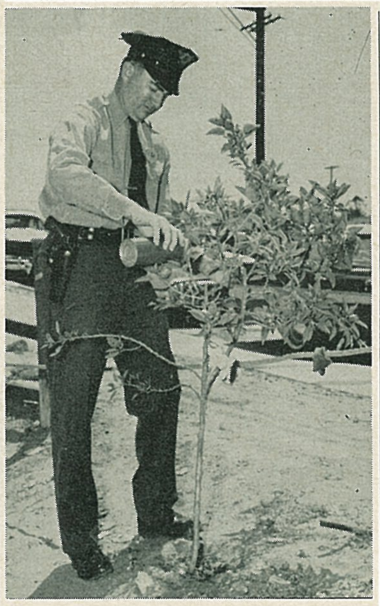
Discount Offered For Padres Games

Discount tickets to the July 15 and July 22 home games of the Padres baseball club will be available at Convair SD employee services two days before each game.

The tickets are good for box seats or general admission at a 75-cent reduction in price when presented at the Padre box office. With the discount tickets, reserved seats may be purchased for $1.25 and general admission seats at 50 cents.



HONORED—J. Arena of Dept. 223-0 (left) and Paul Ferrara (Dept. 6-136) took home awards at June meeting of SD Management Club. Arena won May MacSave-it for CIP that eliminates 100 per cent pressure testing on tubing assemblies. Ferrara won club's Mug of Month for June.



NAMELESS — Convair SD guard, David Davis Jr., waters unidentified "tree" guards are tending at Sassafras St. parking lot.

Guards Nurture Own Shade Tree

Guards at the Convair SD parking lot on the northeast corner of Sassafras and Pacific Highway are busy raising their own shade.

Several months ago they discovered a tiny sprout along the fence and joined in a project to nurture it into a respectable tree. Deane Bailey and A. C. Reitmeier, expert gardener on his off-hours, spearheaded the mutual campaign to "grow a tree."

Watered with overflow from their water tank and fed with organic food the little plant has thrived into a small tree several feet tall.

Only trouble is, so far—no one can identify the stripling!

Air Explorers Hosts At SD Conference

Air Explorer Squadron 340, which is sponsored by the Convair SD Management Club, yesterday (July 7) hosted a meeting of 18 Explorer Units of the San Diego Council of Boy Scouts in the Bldg. 19 conference room.

Plans were formed for district intra-unit activities. Mike Kemper (son of W. R. Kemper, Dept. 292) and Karl Trondle (son of K. E. Trondle, Dept. 21-2) along with Andy Drollinger, squadron advisor, represented the Convair troop.

Convair SD's Honer On IRE Committee

R. E. Honer, assistant chief engineer - electronics at Convair San Diego, has been elected to the administrative committee of the Institute of Radio Engineers, national professional group on engineering management.

Honer's three-year term began July 1.

The organization is concerned with the technical, industrial, and educational activities and problems related to engineering management administration.

$5,000 Remains In 'RX' Awards

(Continued from Page 1)

"If the quality and volume of ideas measure up during this last month to those submitted during the campaign's early days I think it will prove the long-range success of the program," Coggan said.

"A major purpose of a campaign of this type is to make cost-conscious thinking a habit that will serve the individual and company in good stead even after the "RX" drive as such is over," Coggan added.

E. E. Hartzler, cost reduction supervisor at Convair SD, pointed out three areas where "RX" proposals would be particularly valuable.

They are suggestions which would aid the prevention of waste at the source, cost-cutting in the area of perishable tools, and low cost production design criteria.



TIME'S MARCHING—Connie MacSave-it holds back hands of Time for last-minute "RX" ideas.

"Convair SD spends almost $2,000 a day solely on the maintenance of perishable tools (hand tools, drills, etc.). Constructive ideas in fields such as these would be of special benefit," Hartzler said.

Tool Engineers Meet July 14

A program of interest to all Convair SD tool engineers will be given at the July 14 meeting of the San Diego chapter of American Society of Tool Engineers.

"High Temperature Sandwich Structure," will be the topic of William Walters, tool project engineer of Rohr Aircraft Corp. at the dinner meeting to be held at Aztec Cafe, 2696 Balboa St., Pacific Beach. Dinner will be at 7 p.m. with the technical meeting at 8.

Earl Williams of SD-Dept. 603-6, chairman of the San Diego chapter, reminds all Convair people interested in attending to make reservations before next Monday (July 13). Price of the dinner is $2.75 for members and $3 for non-members. For further information call Williams, ext. 778, Plant 2.



THE WINNERS—June Management Club event at Astro was both beginning and end. It was end of regular activities until after summer and beginning of duty for new slate of officers, shown standing above during swearing in ceremony. Meetings resume in September.

★ Convairiety ★

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FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

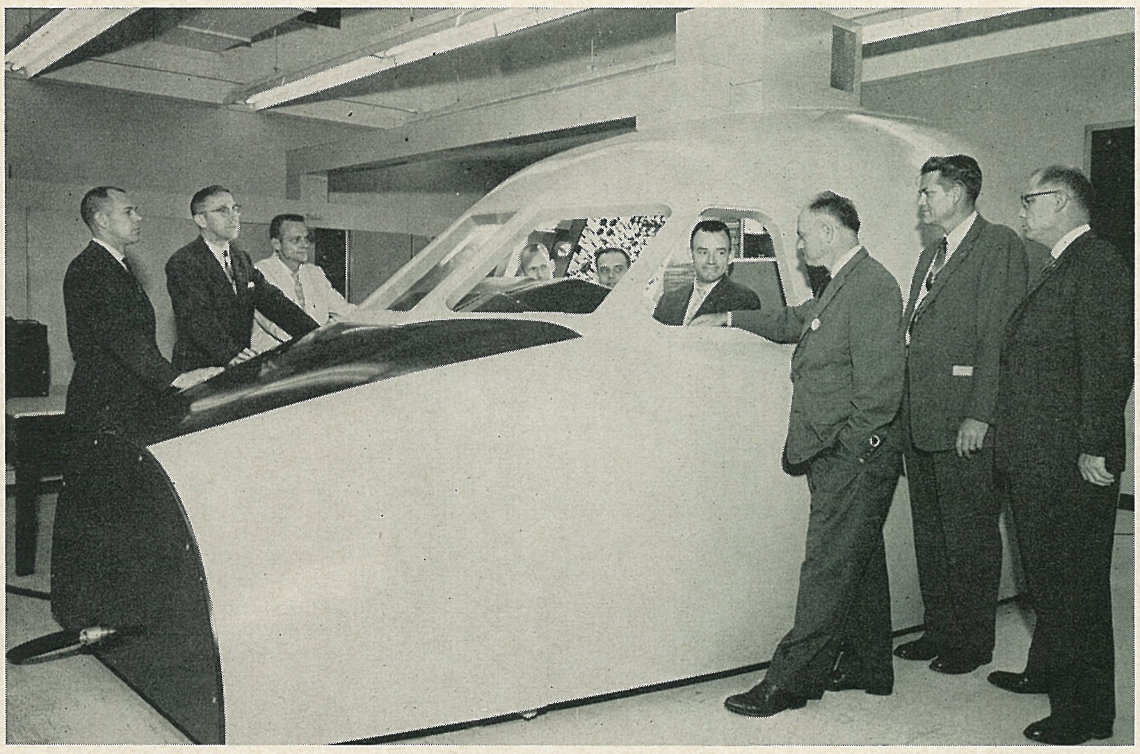
Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Openings Exist in Wives Club Bowling

There are some openings for Astronautics wives and daughters in a special Monday morning (10:30) bowling league at Bowlero under the sponsorship of the Astro Wives Club.

Vacations, plus low initial participation, have left some of the three-man teams short of keglers. Interested parties may report to Bowlero at the regular time or contact Barbara Mahaffey at BR-7-5094 for details.



FIRST "GRADUATES"—Grouped around cockpit procedures trainer at Convair SD are TWA personnel, first customer class to complete Convair 880 training course in preparation for delivery of first plane this fall. Left to right are G. A. Hibbeler, E. S. Gooch, J. R. Mueller, M. S. Antes, J. J. Harris, J. B. Buckmaster, C. L. Johnson, Convair SD production flight engineer-instructor, H. C. Claxton, and W. W. Williams. D. M. Crowley, manager TWA ground school, was not present.

Novel Shock Absorbers Protect 'Passengers' in Simulated 880 Crashes

A giant "swing" has been tossing passenger seats of the Convair 880 through the air with crash landing force.

"But the dummies in the seats during tests are absorbing only what would result in a headache for a human," said A. R. Vollmecke, assistant group engineer in charge of dynamic tests of 880 passenger seats.

Results showed that the 880 seat backs will crush before passenger injury could occur, explained Vollmecke, easing the effect of rapid deceleration.

Seats for the 880 jet transport, being made by National Seating Co. of Mansville, Ohio, will be of an improved ductile sheet metal design. The material yields enough to allow impact to spread over a large area.

Rubber and steel dummies, weighing 170 lbs. each, have been belted into seats made to production specifications by Convair SD experimental department. Seats, fastened to a large platform, were dropped via a pendulum attached to the ceiling of the structures test lab at the SD seaplane ramp. Forces simulated those of a crash landing. In static tests the seats were put under down loads which would be experienced in an extremely hard landing.

An accelerometer measured the force with which the dummies hit the seat backs at time of impact.

"Early indications of the head impact test program are that the seat back design for the 880 is even safer than that used in the Convair-Liner 340 and 440, which was recognized as a standard of safety throughout the aircraft industry," remarked H. A. Mellinger of the 880 project office.

Under test along with the seats are the seat energy absorbers developed by Mellinger and George Hendry (Dept. 6-5). Attached to the seat belts the energy absorbers are designed to reduce loads two and three times over short periods of time by absorbing the crash impact force.

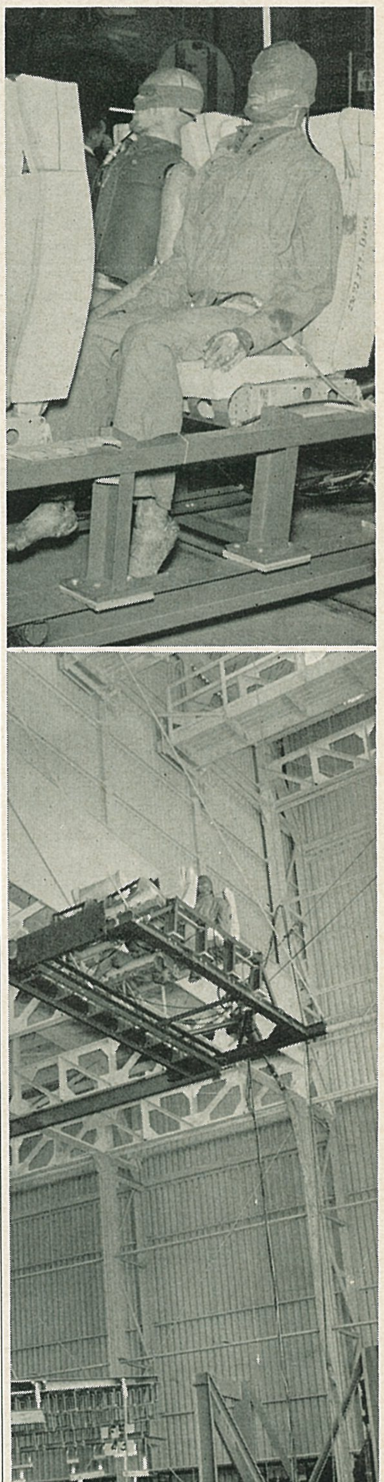
Object of the Convair-developed units is to keep the loads in any emergency situation below 9g (force equal to nine times the combined passenger-seat weight), maximum load under which seats are required to endure on the 880.

The seat energy absorbers are to be in use only when needed—that is by reducing short interval high forces in the range of 15 and 20g to the relatively safe levels between 7 and 9g, said Mellinger.

"The only way to keep passengers safe is to keep them in the seats and the seats firmly attached to the plane," he emphasized. "The energy absorbers will disperse forces which, otherwise, might rip seats from their moorings and toss occupants about."

Both the dynamic head impact tests and static tests have been conducted under conditions required by FAA for certification by structures lab personnel headed by W. E. Wise, group engineer. Crash energy absorption tests were part of the Convair SD research and development program beyond FAA requirements.

"Our goal is to provide 880 passengers with the very safest seat it is within our power to construct," Mellinger concluded.



"CRASH" LANDING — Rubber and steel dummies take beating as they undergo simulated crash landings to test safety features of Convair 880 passenger seats. Upper shot shows "passengers" in seats bolted to platform before being swung pendulum fashion in recent dynamic tests.

New Harness, Ejection Seat For B-58 Tested

A new harness for the B-58 Hustler ejection seat was due back at Convair Fort Worth this month after exhaustive tests at Philadelphia Naval Yard.

Principal feature of the refined and improved seat is a harness of straps which holds a crewman's arms, legs and body firm as he ejects from the aircraft.

Another new device automatically holds the crew member's head steady during ejection.

The suit is believed to be the first in the industry to incorporate the new type rigging.

It was tested in the Air Crew Equipment Laboratory in Philadelphia as another step toward an improved escape system for B-58 crews.

Harness previously had been tested in actual flight four times. This was from the aft seat of an F-94 flown in test flights by Wright Air Development Command.

Further tests will be at Convair Fort Worth and the Air Force's Hurricane Supersonic Research Site sled track in Utah, according to J. E. Hickok, project test engineer.

The seat features a rocket catapult as well as the new type harness.

"The rocket catapult system is a significant improvement over the present ballistic type," said Tino Sierra, project design engineer.

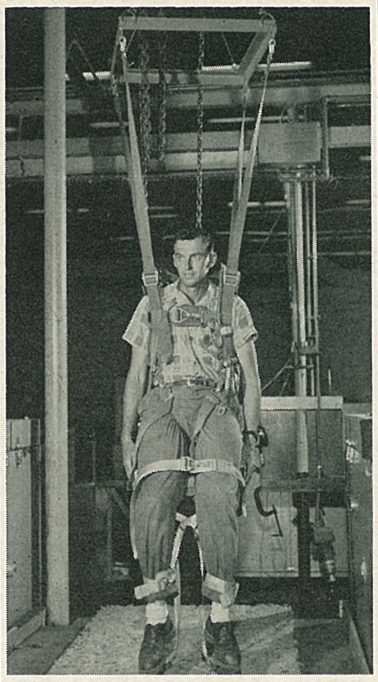
"The rocket catapult ejects the crew member up—and then forward. It also sends the crewman higher to assure safe clearance of the aircraft, and improves safety in low altitude ejections."

At all times while crew members are in the B-58, they'll be "hooked up" to the new harness. The harness, in turn, is attached to a survival kit fastened to the parachute.

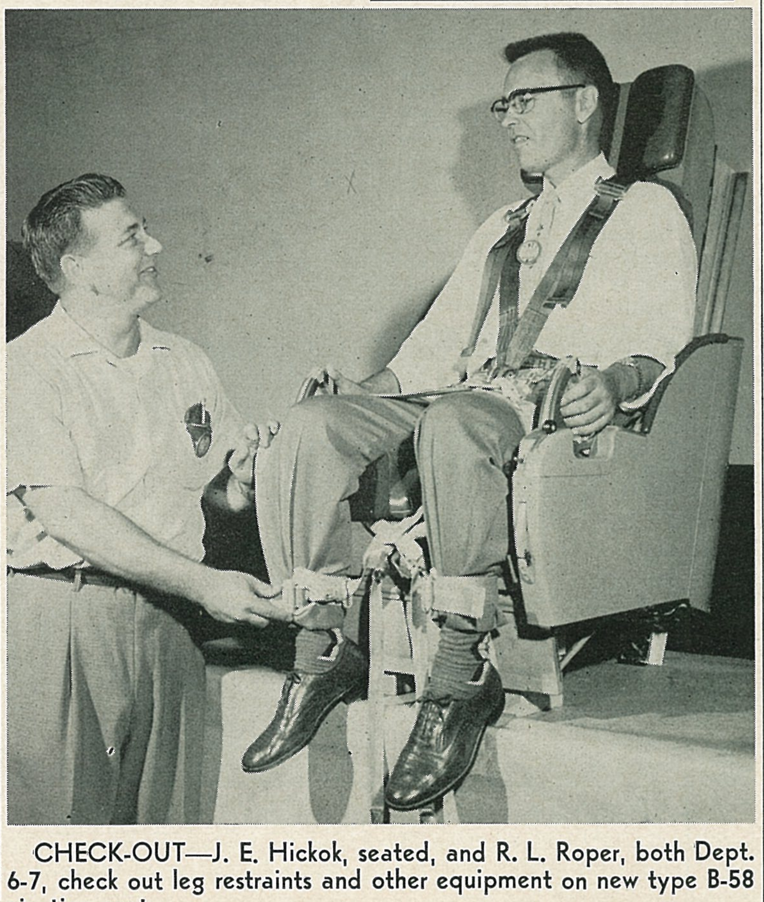
To eject, the crew member pulls on seat hand grips to ready the harness for ejection. He then needs only to squeeze one trigger. Milliseconds later the rocket motor fires up and the man is riding a "flying seat."

At a safe distance from the aircraft, the lap belt opens, the seat falls away and the parachute automatically opens—if the pilot is below 15,000 feet. If above that altitude, a special device checks opening of the parachute until the crew member free falls to 15,000 feet.

Development of the new seat is the prime responsibility of the furnishings design group in engineering which reports to Max Martin. Flight test and engineering test lab personnel are responsible for testing.



IN HARNESS—Floyd Foreman, Dept. 36, demonstrates position B-58 crewmen would be in while descending in parachute.



CHECK-OUT—J. E. Hickok, seated, and R. L. Roper, both Dept. 6-7, check out leg restraints and other equipment on new type B-58 ejection seat.

Reliability Section In Operation at FW

Quality control reliability activities at Convair Fort Worth are now being handled by the newly created Dept. 27-7.

The new section, under supervision of D. W. Ascherin, is administratively responsible for the collection, analysis and reporting of reliability data on B-58 subsystems.

Growing emphasis being placed on reliability necessitated formation of the new section.

Nine From TWA Get 880 Course

Nine TWA training personnel, who will indoctrinate TWA flight crews, flight engineers, and pilots in operation of the Convair 880 jet transport, have completed the first customer training course given by production flight department at Convair SD.

The five-week course, which ended July 2, covered general familiarization, systems operations, flight characteristics, and aircraft performance, said P. H. Selby, flight training supervisor.

Included in the intensive course was ten hours per man in the 880 cockpit procedures trainer. "All of our first 'students' expressed themselves as greatly impressed with the value of the trainer," said Selby.

Part of the group, together with several TWA performance engineers, are remaining at Convair SD this week to make up a class of ten for a one-week performance engineering course given by SD aerodynamics group.

Convair men, all production flight engineer-instructors, presenting 880 material are C. L. Johnson, who teaches instruments, electronics, electrical; L. J. Rice, fire detection and extinguishing, fuel systems, power plant; W. B. Van Houten, airplane general, flight controls, emergency equipment; C. J. Falkenthal, hydraulic and adverse weather systems, air conditioning and pressurization; L. M. Norton, aircraft performance and flight characteristics. L. W. Hughes is training coordinator.

Robert Smith Shifts to GO

Robert F. Smith, chief of educational services at Convair Astronautics since October, 1958, has joined the General Office staff as an assistant to R. H. Biron, Convair vice president-administration.

He replaces M. G. Burland who has left the company.

Pending selection of a replacement at Astro, Smith will continue to direct educational services activities at that division.

Smith has spent most of his life in Southern California. He attended grade and high schools in San Diego and received degrees from the University of Southern California (B.A. and B.S.) and UCLA (M.B.A.).

Prior to joining Convair last year, Smith served the Air Force and various private businesses as a consultant on management development and other educational matters. He was also an administrator in UCLA's Institute of Industrial Relations and had been supervisor in employee relations for Ryan Aeronautical Co.

Convair FW Visited By Graduate Nurses

Fourteen graduate nurses working toward bachelor of science degrees in nursing at TCU and Harris Hospital got a glimpse of industrial medicine in action recently when they toured Convair Fort Worth's medical facilities.

Dr. J. K. Leverett, chief physician, and Margaret V. Crouch, head nurse, hosted the nurses and took them on a tour of the plant's dispensary and to one of the assembly line first aid stations.

ASTRO MAN NOW CALIF. GUARD MAJOR

William Hedrick of Astronautics' engineering was recently promoted to the rank of major in the California Army National Guard. Hedrick is radar officer of the 114th Anti-Aircraft Artillery Brigade at Camp Elliott.



LOVELY—Holley Susens, 17, daughter of Convair FW's William Susens, was crowned "Miss CRA Health Club" recently. She is senior at Amon Carter Riverside High and top English student and drum majorette.

Cataloging of Divisions' Resources Seen as Step in Overall Reliability

Reliability requirements for weapon systems will have a far-reaching effect throughout General Dynamics Corporation, Dr. A. M. Small of Convair San Diego told representatives at a recent corporate reliability panel at Stromberg-Carlson in Rochester.

Dr. Small, staff specialist in engineering, gave a synopsis on reliability specification contents, then led an open discussion of what must be done.

Convair Fort Worth's J. Y. McClure, manager of quality control and chairman of the panel, discussed the reliability resources manual.

He pointed out that cataloging all corporation resources by division will help in handling overall reliability programs. This will show special capabilities of each division and make it possible for one division to call upon another for help.

Progress in Convair Fort Worth's reliability program was reported by Dr. N. H. Simpson, chief of reliability programming. He told of the B-58 program, the approach to the problem and gave results with illustrative charts.

Qualification testing was discussed by Convair Pomona's T. A. Vogel who emphasized that Convair's work in this field is advanced.

An "interchange of data" plan was proposed by Vogel. He pointed out that test results could be exchanged among divisions.

Others on the program included Canadair's A. B. Oxley, G. R. Hauser of Convair Fort Worth, H. F. Eppenstein of Convair Astronautics, L. B. Richardson, senior vice president of engineering for General Dynamics Corporation, and R. G. Schimpf, chief engineer, Micronics Division, Elgin Watch Co.

Also, D. R. Archibald of Convair Astronautics, S. M. Truex, office of maintenance engineering and Assistant Secretary of Defense, and J. J. Riordan, staff director for inspection and quality control, office of the Assistant Secretary of Defense.

Other Convair Fort Worth people attending were J. M. Murphy of the electronics design group and J. L. Coburn, chief of reliability vendor coordination.

Next panel meeting will be in September at Astronautics.



RELIABILITY—Studying agenda for reliability panel meeting recently in Rochester are: left to right, J. Y. McClure, Convair FW, panel chairman; John J. Riordan, of Office of Assistant Secretary of Defense; L. B. Richardson, senior vice president of General Dynamics.

Subcontractors Get 880 Data

Latest material on the Convair San Diego 880 jet transport compiled and developed for customers by SD transport service personnel is being incorporated in training courses given by subcontractors in other parts of the country.

To give 880 customers the same material with the same approach, said Don Maxion, regional field representative (Dept. 15-4), interchange of information has been effected between Convair SD and manufacturers of 880 components. For instance, text and diagrams compiled by Harry Eddis, Ed Buckman, and Bob Fitzgerald of Convair SD are being used intact in courses on the 880's electrical systems given by General Electric Co. at Waynesboro, Va.

Several instructor personnel of the G. E. engine school at Cincinnati, Ohio, headed by E. J. Goetz Jr., supervisor of publications and training, were at Convair SD in June for the second 80-hr. course to be given a G. E. group. Information covered installation of the CJ-805-3 engine, engine build-up and systems which receive operating power from the G. E. engine.

Nuclear Plane Parley Held

Members of the Scientific Advisory Committee to the Chief of Staff of the U. S. Air Force conferred at Convair Fort Worth June 26 on the nuclear powered aircraft program.

Convair Fort Worth was chosen by the Air Force in March to design the nation's first atomic powered airplane.

The committee of 13 members is headed by Courtland D. Perkins, chairman, and Colonel Clyde D. Gasser, USAF, secretary. Robert A. Widmer, Convair Fort Worth's chief engineer, is a consultant to the committee.

The group came to Fort Worth from Cincinnati, Ohio, headquarters of General Electric's nuclear engine project. G. E. is teamed with Convair on the project and has the job of building the atomic powerplant.

Convair Nomenclature Changed For Internal Communications

A number of changes in nomenclature to be used in Convair internal communication were announced last month in Convair Notice No. 81.

These changes will be incorporated into all practices, notices and manuals, as revisions are being made. However, for the present the titles themselves of Division Standard Practices and other presently named existing manuals will not be changed. An exception will be the Convair Management Manual, which will now be called the "Convair Supervisory Manual."

Changes listed are:

"Corporation" or "Corporate" will be used to refer to General Dynamics Corporation. The term "company" will not be used in referring to either Convair or General Dynamics Corporation.

"General Offices" (or "Convair-General Offices") will be used to refer to Convair's top management offices.

"Operating division" will be used to refer to any one of the five major operating facilities of Convair.

Position titles in internal communications will refer to titles of Convair positions, unless otherwise specified.

"Convair (or General Offices) Executive" and "Convair (or General Offices) Staff Executive" will be used to identify personnel having titles as defined in CSP 10-2.

"Manager" will be used to refer to the manager or Convair Executive in charge of an operating division, e.g., "Vice President and Manager Convair-Pomona," etc.

As mentioned above, "Convair Supervisory Manual" will refer to the booklet formerly known as the "Convair Management Manual."

"Convair Notice" will refer to Convair's system of announcements at the General Offices level.

At the operating division level, Convair's system of announcements (formerly "Division Notices") will be titled as follows: "Convair-Pomona Notice," etc.

"Division Standard Practice" will continue to be used to refer to Convair's standard practice system at the operating division level. At a time at each operating division when it is practical to convert the titles of DSPs to operating division Standard Practices, the titles to be used will be: "Convair-Pomona Standard Practices," etc.

Other Convair manuals containing the words "Corporate" or "Division" in the title will be converted by using "Convair" at the General Offices level and "Convair-Pomona," etc., respectively, at the operating division level. This conversion will be made as these manuals are revised under normal procedures.

"The phrase "among (or between) operating divisions" will be used instead of "inter-division."

The phrase "within Convair" will be used instead of "intra-company."

The phrase "within Convair-Pomona," etc., will be used instead of "intra-division."

Instructions concerning nomenclature to be used in external communications will be issued at a later date, the Convair Notice stated.

Crash Rescue Talks Popular

J. A. Hitch, Convair SD technical representative at George AFB, Calif., is responsible for introduction of a program on crash rescue which is proving popular with civic and military groups in the area.

So far he has given the talks to 16 organizations, including fire departments, local and state police, California and U.S. Forestry Service, George AFB, Nellis AFB, March AFB, and Marine Corps Base at Barstow. Other groups are asking for similar programs.

Points covered are normal entry into the F-102A cockpit, emergency entry, release of pilot from seat belt, removal of pilot to prevent personal injury, general layout of the F-102A with emphasis on fuel location and armament, chemicals for use in aircraft fires, best approach to aircraft for fire trucks and personnel.

Accompanying Hitch on his presentations have been personnel of the 329th Fighter-Interceptor Squadron.

All Different

'Old School' Caps Are Various Among Nurses at Convair SD

Only two of the 20 nurses who watch over Convair San Diego people are entitled to sport the same type of perky headgear.

Nineteen different styles of caps, ranging from fluffy organdy to tailored stiffly-starched linen, some with large points, small points, black velvet stripes, are worn by Convair SD's efficient corps of nurses.

Designating the school from which each girl has been graduated, the only two who finished from the same hospital—and thereby wear the same kind of caps—are Jeanette George at Plant 1 and Ida Hunt at Plant 2. They both took their training from Ancker Memorial Hospital School of Nursing at St. Paul, Minn.

"Our nurses have come to us from 14 different states, from Washington to Florida and from California to New York," said Frances Collier, head nurse who is a graduate of St. Mary's Hospital School of Nursing, Kansas City, Mo.

"And, though they have been trained by as many different schools as there are nurses, every one of ours is extremely well qualified for the specialized industrial work. The same high standards of nursing are maintained at Convair as at any hospital with the same code of ethics observed," she continued.

In fact, as Mrs. Collier pointed out, nurses at Convair SD must have a diversified training to be able to handle the different types of work required including X-ray, laboratory work, physiotherapy, physical exams for hazardous work, in addition to first aid in emergency cases.

Besides Mrs. Collier, nine nurses are assigned to SD Plant 1 while seven are at Plant 2, and two stationed at Rose Conyon. One, Georgette Horton, divides her time between Plant 1 and Plant 2 on the third shift.

Dorothy Chesler, assistant head nurse, has been at Convair SD the longest consecutive period of time, having joined the company in July, 1942. Mrs. Collier also has been with Convair SD since 1942 but has not been here the entire time.

Atlas Missile Goes to Paris

A 52-ton Atlas missile recently crossed the Atlantic for the first time to make its European debut at an air show June 12-21 in Paris.

Dismantled into major sections, the Atlas was flown to Europe aboard a giant C-133 cargo plane, departing from Westover AFB, Mass. and arriving at Le Bourget Airport in Paris.

The huge intercontinental ballistic missile was part of a U. S. Air Force display at the 23rd annual International Air Show in Paris. Thirteen nations, including the Soviet Union, had exhibits.

The same Atlas has also appeared in exhibitions in Dallas and Las Vegas. It has been modified to allow visitors to walk inside the base.



CAPPED CIRCLE—Clockwise, Convair SD nurses, Jeanette George, Evelyn Carson, Dorothy Scrivener, Helen Werdelman, Olga Fort, and (in center) Frances Collier, show different styles of nurse's caps, each representing a different school for universal identification. Nineteen schools are represented by Convair SD nurses.

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.

Electronic Printing To Become Popular

SAN DIEGO—New electronic printing systems for high-speed registered printing of computer data on pre-printed forms have been announced by Stromberg-Carlson here.

S-C 5200 Systems print numbers, letters or symbols at speeds up to 5,000 lines per minute on pre-printed forms. Stromberg-Carlson sees their widespread use by financial institutions, insurance companies, government agencies and manufacturing firms for large-volume processing of such business forms as invoices, checks, statements, premium notices and inventory records.

Material Service Corporation To Become Dynamics Division

NEW YORK — The boards of directors of General Dynamics Corporation and Material Service Corporation announced last week unanimous approval of the merger of their respective companies. The proposal provides that General Dynamics' acquisition of Material Service Corporation will be financed through an exchange of stock. Share owners of both corporations will be asked to approve the merger at special meetings.

Material Service, one of the nation's largest producers of building materials, concrete products and coal, will become a major division of General Dynamics. Henry Crown, present chairman of the board of Material Service, will continue as chairman of the new division.

According to Frank Pace Jr., board chairman of Dynamics, the merger of these two organizations, one primarily in defense, the other entirely in commercial business, offers vital advantages of long-term growth and development for both. Pace also said "the interest and activities of the Crown family in Material Service Corporation will be maintained. The policies and program relating to personnel and the conduct of the business which have contributed so much to its success and growth will be continued."

Pace pointed out that Dynamics is engaged in a long-term program to supplement its defense business with expanding commercial businesses. The corporation's ultimate objective is to achieve an approximate balance of defense and commercial earnings. The merger with Material Service represents a long step in that direction, he said.

Material Service was started in 1919 by Henry Crown, Irving Crown and the late S. R. Crown. For 1958 net sales were $114 million.



FOR RESEARCH—In top photo are some of key persons at dedication of $10 million John Jay Hopkins Laboratory for Pure and Applied Science in San Diego. From left, Dr. Frederic de Hoffmann, head of General Atomic Division; Frank Pace Jr., chairman of General Dynamics board; Mrs. John Jay Hopkins, for whose late husband laboratory is named; and Prof. Niels Bohr of Denmark, Nobel Prize winning nuclear physicist, who was chief speaker. Below, at far left, is Earl D. Johnson, General Dynamics president.

Reactor's Power Tapped For Dedication of Lab

SAN DIEGO — General Atomic's TRIGA research reactor was "flashed" to a peak power level of 1,500,000 kilowatts—a new record for atomic reactors—in the climax to the dedication of the John Jay Hopkins Laboratory for Pure and Applied Science last month.

Dr. Frederic de Hoffmann, president of General Atomic Division, described the "flashing" to the audience as an impulse received from the TRIGA reactor serving to unveil the laboratory's dedication plaque.

The TRIGA prototype reactor, located at the north end of the laboratory, increased its power output from one watt to 1,500,000 kilowatts (thermal) in less than one-tenth of a second. The actual flash lasted approximately 15-thousandths of a second. Scientific personnel could safely stay within a few feet of the top of the tank during the flash. The self-regulating feature of the TRIGA reactor's unique fuel-moderator elements of uranium-zirconium hydride immediately reduced the power to normal operating levels.

This peak flash of a million-and-a-half kilowatts is a new record for the energy level attained by any nuclear reactor in controlled operation, exceeding a previous recorded high of 530,000 kilowatts achieved by the Atomic Energy Commission's kinetic experiment on water boilers (KEWB) in a test conducted April, 1958. To have produced a similar burst of instantaneous energy by electrical means would have taken the entire generating capacity serving San Diego.

Electronic Aids Will Cut Size Of Subs' Crews

GROTON — General Dynamics Corporation's Electric Boat Division has been selected by the Office of Naval Research to serve as manager of an industry-Navy team working on a submarine integrated control system (SUBIC) that may permit manpower reduction on atomic powered submarines from the present average 100-man crew to 12 men.

Target date for placing the integrated control system in a nuclear submarine is 1964 and the project promises to be of importance in both small "killer" (anti-submarine) submarines and the larger ballistic missile-firing subs.

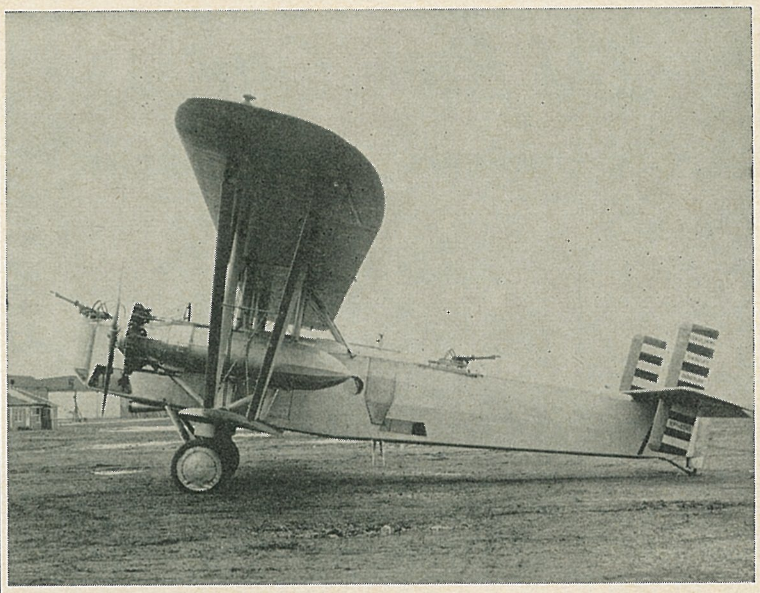
Primary purpose of the program is to increase the operational and combat effectiveness of submarines. The SUBIC scientists are attempting to create a balanced man-machine partnership that will utilize electronic sensing and data-processing equipment to permit up-to-the-minute tracking of contacts and provide information necessary for precise navigation and weapons firing.

Ted Schroeder Joins Lanphier's Staff

Ted Schroeder, holder of many national tennis titles and more recently an executive of Kold Hold Sales Co. of Los Angeles, has joined the staff of Tom Lanphier Jr., Convair vice president.

He will be a military relations administrator.

Schroeder was educated at USC and Stanford and served in the Navy, 1942 to 1945, as a lieutenant. He teamed with Jack Kramer in 1946 to win back the Davis Cup from Australia and successfully defended it the following year.



AN ALSO RAN—This was Consolidated Sikorsky Guardian, built for Army bomber design contest in 1927 but withdrawn at last minute as not coming up to specifications. Consolidated collaborated with Sikorsky Manufacturing Co. on this project with latter building the plane at Long Island plant.

Army Engineer Laddon Joins Consolidated Air

(This is 12th installment of a continuing history of Consolidated Aircraft Company, which ultimately grew into Convair Division of General Dynamics Corporation.)

From the standpoint of avid and sustained public interest, American aviation enjoyed its golden age in the closing years of the 20s. A flourishing air traffic developed in Europe after the war, but at home the average American remained apathetic toward flying in all its aspects. This changed swiftly when a young air mail pilot, Charles A. Lindbergh, fired the nation's imagination with a solo flight from New York to Paris on May 21, 1927. From about that time the great aviation boom was on.

This climate was made to order for the prospering Consolidated Aircraft Co. which had determined to expand into the commercial market as well as heavier military aircraft. Attention centered at first on the fruitless design of a bomber. However, the end result was a new family of flying boats that were to dominate U.S. naval aviation for a decade, and incidentally spur creation of the country's first international seaplane line.

President Reuben Fleet's opening move was to employ one of the Army's foremost civilian engineers. This was I. M. Laddon, who joined the Engineering Division of the Air Service in 1917 and was made chief of Design Branch 2 (heavy aircraft) at McCook Field in 1919. Among his accomplishments were the GAX attack plane of 1919, and the all-metal CO-1 of 1921. When the Army stopped building prototypes he turned to designing details and was awarded patents in 1923-27 on aerodynamic, structural and equipment developments. The Bendix-Laddon disc wheel and integral brake became standard aircraft equipment of the late 20s.

Laddon joined Consolidated in March, 1927. He remained at Dayton with a field staff. (Among them was C. B. Carroll, who retired from Convair in 1956 after a long career in aviation. His last post was as project engineer on the Navy-Convair experiments with the first vertical takeoff plane, the XFY-1.)

What the Army Air Forces wanted most in 1927 was a modern, heavy (twin-engine) bomber. Consolidated was one of five companies that entered a design competition, and the Dayton staff worked for some months on Model 11. This was dropped when Fleet and another competitor, the Sikorsky Manufacturing Co., reached an agreement to collaborate on a Sikorsky design.

The bomber was completed in Sikorsky's Long Island plant late in 1927. Its wing span was 100 feet and power plants were 525 hp. Pratt & Whitney Hornets. When wheeled out for its maiden flight the plane bore the legend "Consolidated Sikorsky Guardian" on its red and white tail surfaces. Consolidated pilot Leigh Wade, a veteran Army flyer and later (1928-1933) a vice president of Consolidated, was at the controls.

After a series of tests, however, Consolidated decided the plane fell short of specifications and withdrew from the design contest. It was too late to cancel press releases and advertisements that described the Guardian as a joint product of the two companies. The Army bomber contract eventually went to the Curtiss B-2 Condor.



30 YEARS AFTER—I. M. Laddon, Army's foremost aviation designer when he joined Consolidated in 1927, is shown here (right) receiving his 30-year pin from Frank Pace Jr., chairman of General Dynamics Corporation board.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period July 1 through July 15.

Twenty-year: Dept. 8-2, J. W. Stark; Dept. 218, Stephen Gardner; Dept. 600, C. L. Lyons, A. J. Woods; Dept. 603-7, G. N. Westerlind.

Fifteen-year: Dept. 3-1, E. W. Sutton; Dept. 31, George Lutz, T. E. Shipley; Dept. 120, J. J. McFarland; Dept. 136, L. D. Stone; Dept. 146, P. F. Jewell; Dept. 180, W. D. Dominoe; Dept. 230, H. M. Nance; Dept. 400-1, L. W. Raper; Dept. 406, R. W. Carr; Dept. 603-6, J. C. Beltran.

Ten-year: Dept. 3-1, L. C. Jones; Dept. 6, Ruth M. Holden, E. A. Kops; Dept. 21-3, K. R. Conney; Dept. 31, J. R. Dickinson, Leopaldo Lopez; Dept. 98-7, Grace P. Lloyd; Dept. 120, Blanche J. Wilson.

Dept. 135, Anthony Gamboa; Dept. 136, J. O. Powell; Dept. 180-0, J. E. Doane; Dept. 218, Florence D. Myers; Dept. 230, Laura T. Davis, E. J. Sundstrom; Dept. 232, W. H. Isom; Dept. 266, Alice G. Lyons; Dept. 279, C. E. Perkins; Dept. 288-3, D. A. Day, May D. Schell; Dept. 406, J. R. Parga; Dept. 600-0, Helen C. Gaughen.

Promotions

SAN DIEGO

Promotions to or within supervision effective June 22.

Dept. 171, Field Operations: To asst. foreman, D. D. Guest.

Dept. 231, Model 8 Intermediate Fuselage Section: To asst. foreman, F. A. Grand.

Dept. 232, Model 8 Aft Fuselage Section & Mate: To asst. foreman, J. H. Bradshaw, F. D. Meadows.

Dept. 279, Model 8 Post Production Service: To asst. foreman, G. R. Simpson.

Dept. 403, Tool & Die Shop: To general foreman, R. F. Greggs. To foreman, A. Berg. To asst. foreman, C. E. Heller.

Dept. 600-1,Tooling: To tooling asst. supervisor, R. L. Bolick.

Births

SAN DIEGO

ARENA—Daughter, Patricia Ann, 9 lbs., 4 oz., born May 21 to Mr. and Mrs. Joseph Arena, Dept. 223.

BAKKEDAHL—Daughter, Diana Lynn, 7 lbs., 2 oz., born April 5 to Betty (Dept. 34-1) and Richard Bakkedahl.

BENNETT—Son, James Gordon, 5 lbs., 10½ oz., born June 6 to Mr. and Mrs. John Bennett, Dept. 280.

COSSANO—Son, Michael James, 8 lbs., 9 oz., born June 12 to Mr. and Mrs. N. E. Cossano, Dept. 403.

MAUST—Son, Walton F. Jr., 7 lbs., 2 oz., born June 15 to Mr. and Mrs. W. F. Maust, Dept. 403.

OGNIBENE—Son, Bruce Ronal, 8 lbs., 4 oz., born June 22 to Mr. and Mrs. Daniel F. Ognibene, Dept. 6.

VALDILLEZ—Son, Ralph Jr., 6 lbs., 15 oz., born June 28 to Mr. and Mrs. Ralph Valdillez, Dept. 267.

Personals

SAN DIEGO

I extend my grateful thanks to the friends in Dept. 218 who were so thoughtful when I lost my mother.

Helen Wittig, Dept. 218

* * * *

The family of George MacLean, Dept. 603-1, offers heartfelt appreciation to the many friends at Plants 1 and 2, Astronautics and Vandenberg AFB, for the expressions of sympathy and floral tributes.

Mrs. W. K. Selton
George F. MacLean
Jack E. MacLean

* * * *

I wish to express my thanks to all Convair San Diego and Astronautics friends who were so kind and thoughtful during the illness and passing of my husband, Jack Lowry, Dept. 211, Astronautics.

Billie Lowry, Dept. 192

Retirements

SAN DIEGO

ATKINSON — Harry V., Dept. 188. Seniority date March 4, 1929, retirement effective June 26, 1959.

BEGER—Arthur H., Dept. 14. Seniority date Sept. 29, 1950, retirement effective June 26, 1959.

DANIELS—Charles H., Dept. 407. Seniority date Feb. 19, 1952, retirement effective June 26, 1959.

DONAHUE—Andrew J., Dept. 3-1. Seniority date July 29, 1952, retirement effective May 21, 1959.

DREYER—Lewis E., Dept. 401. Seniority date Sept. 2, 1941, retirement effective May 14, 1959.

FUNKE—Otto H., Dept. 120. Seniority date Jan. 27, 1930, retirement effective June 26, 1959.

ISAAC—Minnie W., Dept. 109. Seniority date Oct. 30, 1950, retirement effective June 9, 1959.

WORDLEY—Clarence O., Dept. 201. Seniority date June 5, 1947, retirement effective June 12, 1959.

Deaths

SAN DIEGO

CLEVERS—Cyril H., Dept. 215. Died June 19. Survived by wife, Anita.





MILESTONE — Frank Cary, Dept. 14-8 (top), and W. J. Gramse, Dept. 101, are latest at Convair SD to receive 25-year service emblems.

Convair Teams Leading League in City Play

A "photo finish" will most likely have to be called if Convair SD's two softball teams entered in the San Diego AAA league continue to race neck and neck down the home stretch.

The Convair "A" team is currently riding a nine-game winning streak marred only by a first-game loss. The Eagles currently have won 11 and lost one. Both teams have substantial leads over the Anderson's Furniture team that is hanging onto third place even though they have been defeated four times.

Activity during the past two weeks saw the Eagles thrash Sutton Plasterers 6-1 and eke out a 1-0 win over the Southeast Merchants. They continued their victory skein with one-run victories over Anderson's Furniture (2-1) and Quaff Barrel (2-1).

The Convair "A" team kept its winning streak intact with decisions over the Southeast Merchants 4-2, Ek and Ek Plasterers 3-1, and Sutton Plasterers 2-0.

★ ★ ★

In shop league action, the first half of the American League schedule ended with teams from Experimental and Planning tied for first place with identical records of five wins and one loss.

In the National League Flite Test was still undefeated last week as play neared the completion of the first round. In games played last week Tooling clipped Mockup 8-7, and Plant Engineering pasted 880 Fuselage 20-4. However, the Fuselage team turned around and whipped 106 Wing 6-1.

Class for Commercial Flying To Start if Interest Shown

A commercial ground school course that will equip students to pass the tests for their commercial pilot's license will start soon at Convair SD—if sufficient interest is indicated.

Requisites for students in the course which would be sponsored by the Convair Recreation Association would be either a private pilot's license or completion of the Solo Flyers ground school course.

Subject matter in the course would be boiled down into 50 classroom hours vs. the standard figure of 120 hours. Two-hour classes would be held every Tuesday and Thursday at Jim's Air Service, Lindbergh Field for 12½ weeks.

Bert A. Shields (Dept. 15-60), a veteran pilot, author and instructor, has been appointed by J. K. Field, SD employee services chief, as instructor for the course.

"The need for a course of this type is readily apparent," Shields said. "While a private pilot's license gives a person sufficient knowledge of the art of flying and his aircraft to operate in a local area it does not equip him to make a flight of any length and duration.

"Flight safety for the individual pilot through a greater knowledge of his aircraft and the art of flying is the main purpose of this course."

Subjects of the course would be set up to coincide with the segments of the multi-section commercial test. Included are civil air regulations, aircraft and theory of flight, aircraft engines, air navigation and radio, and meteorology.

Cost of the course for each student would be roughly 50¢ an hour or a total of $25, considerably below what the course would cost without CRA sponsorship.

Classes would be limited to 25 people. If, after taking the course, a student failed to pass a segment of the commercial test he could retake that portion of the course free of charge, Shields said.

"The response, however, must be there before we start the course," he added. A target date of July 14 has been set up if the response warrants.

Those interested in taking the course or desiring additional information should contact either Shields, ext. 2783, Plant 1; Rex Robinson, ext. 1636, Plant 1; or employee services, ext. 1245, Plant 1.

Entries Deadline Extended For Car Club 'Economy Run'

Entry deadline for the "RX" Economy Run July 19, open to all makes and types of cars, has been extended and entries will be accepted the day of the event.

Peter Aperlo, rally master, urged participants to register early if at all possible. He said a limited number of dash plaques are still available to be given those who sign up ahead of time.

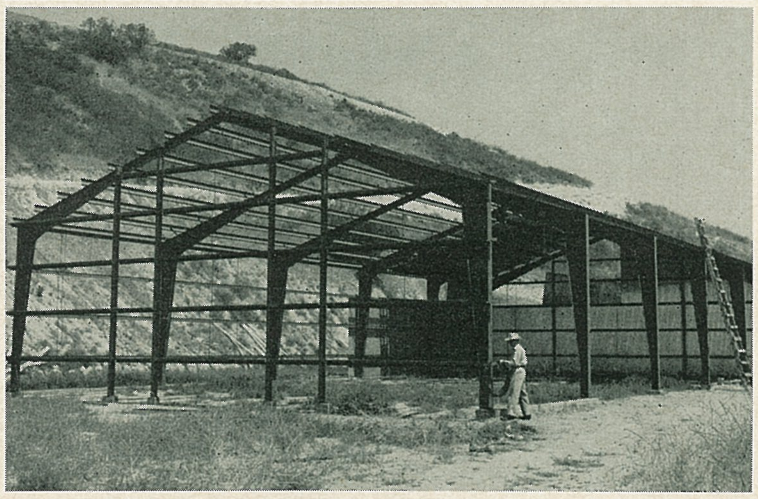
He also pointed out that preentries will cost $1.50 while postentries will be charged $2.50.

The Economy Run, as the name suggests, is planned strictly on a miles-per-gallon basis. It will be a non-navigational event and the 175-mile course has been laid out over well-paved roads, not usually subject to heavy traffic.

The event is sponsored by the SD Sports Car Club. Eight classes, accommodating all makes and types of cars, have been set up. Cars of the same displacement will be grouped together. A minimum of five cars are needed in each class.

Aperlo said the only class that has not already reached or passed the minimum requirement is the under 750 cc. class for sedans and sports cars. Some of the cars eligible for this class are the BMW, and the Fiat 500, 600 and 750. Aperlo added that cars entered in this class have an excellent chance to win the sweepstakes trophy.

The first car will leave the Astro parking lot at 9:01 a.m. To register contact Aperlo at ext. 1104, Plant 1, or BR-2-2360.



HELP WANTED—Volunteers are needed to finish building for boat builders at Gillespie Field. Work is progressing week nights and Saturdays with those who help given preference on boat building list. Contact Dale Cromartie, ext. 1650, Plant 1, for details.



PHOTOGENIC — Camera Clubber Gary Letsinger snapped this shot of lovely Dianne Helman (Dept. 15-6) who is one of models registered with club. Portrait photography will be subject of next quarterly meeting.

Portraits Subject For Club Contest

Subject of the next quarterly contest to be staged by the CRA Camera Club at Convair SD will be posed pictures and portraits.

The contest will start at 7:30 p.m., July 27 in the Photo Arts Bldg., Balboa Park. A judge for the event is still to be selected. Although the contest is limited to club members visitors are welcome to attend.

Ron Ainsworth, club spokesman, said this week that a growing number of Convair gals have registered with the club as models. Group and individual photographic sessions are being set up by the club for the benefit of members.

Allen Jones Elected President of Divers

Convair SD's Delta Divers at their last meeting elected a new slate of officers to guide club activities during the next year.

The new president is Allen Jones (Dept. 95). Other officers include Derek Walton (Dept. 6), vice president; Harry Ruscigno (Dept. 6), treasurer; and Cynthia Casebolt (wife of Bob Casebolt, Dept. 6), secretary.

Tom Richardson, commissioner, announced the "Diver of the Year" award, the club's top honor, this year goes to Chuck Nicklin. He said Allen Jones and Bob Casebolt ranked second and third in the judging.

Richardson said that Casebolt was the winner of a diving competition held by the club June 28 at La Jolla Cove.

SD Golfers Place Second in Tourney

A Convair SD golf squad slipped into second place after the final round of the inter-division matches June 27-28 at Circle R.

Although tied for the lead with Convair Astro after the first round the SD group ended 35 strokes behind the first-place Astro team. The winning score for the Astro golfers was 2,022; SD posted a 2,057 score. Convair Pomona was ranked third with 2,085 strokes.

Tuesday Badminton Resumes in Balboa

Tuesday evening badminton play in the Balboa Park Federal Bldg. will again be open to Convair SD enthusiasts starting July 14, Tom Richardson, commissioner, reported.

Play had been halted during the past month because of the many activities and meetings scheduled for the Balboa Park building. Richardson said organized badminton play and instruction will now be held every Tuesday starting at 7:30 p.m.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY — Trophy Shoot July 12, 9 a.m., Kearny Mesa Range. Meeting July 16, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

BADMINTON — Play resumes July 14, 7:30 p.m., in Federal Bldg., Balboa Park.

BRIDGE — Session July 21, 7:30 p.m., Barcelona Hotel, 4th and Juniper Sts.

CAMERA CLUB — Workshop session July 13, 7:30 p.m., Photo Arts Bldg., Balboa Park. Quarterly photo contest July 27, 7:30 p.m., Photo Arts Bldg., Balboa Park.

GOLF — Last day today (July 8) for registration for July 11-12 sweeps at Balboa course. Convair Golf Club quarterly meeting tomorrow (July 9), Admiral Kidd Officer's Club, 6:30 p.m.

GUN CLUB — Dog show July 14, 7 p.m., Gillespie Field.

JEEP CLUB — Annual picnic July 12 at Pecan Park, 2 p.m.

JUDO — Workout tonight (July 8), 7:30 p.m., CRA Clubhouse, Pacific Hwy. Workouts now scheduled every Thursday at CRA Clubhouse.

MOVIES — Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave.

RADIO CLUB — Meeting at 8 p.m. tomorrow (July 9) at Harbor Drive headquarters.

RIDING CLUB—Annual Point Show July 26 Kenmore Stables, Mission Valley, 9 a.m. Meeting tonight (July 8) home of Frank Darnell, Mission Gorge Rd., Santee, 7:30 p.m.

ROLLER SKATING — Skate night Monday (July 20) at Skateland, Front and G Sts., 6:30-9 p.m. Free tickets at employee services, both plants, and from departmental representatives.

SOLO FLYERS — Registration open for commercial ground school course starting July 14. Call Bert Shields, ext. 2783; Rex Robinson, ext. 1636; or employee services, ext. 1245, all Plant 1.

SPORTS CAR CLUB — Meeting July 15 Museum of Natural History, Balboa Park, 7:30 p.m. "RX" Economy Run July 19 from Astro parking lot, 9 a.m. Call Peter Aperlo, ext. 1104, Plant 1, or BR-3-2360.

SQUARE DANCING — Intermediate classes under way Tuesday nights, 8 p.m., American Legion Hall, 4061 Fairmount Ave.

SWIMMING — Next free swim night Saturday (July 11), 7-9:30 p.m., Mission Beach Plunge. Tickets at employee services, both plants.

TENNIS — Registration open. Call ext. 1245, Plant 1.

Riding Club Plans Point Show July 26

One of the major attractions of the Convair SD Riding Club season, the annual Point Show, will be held July 26 at the Kenmore Stables (formerly Polo Grounds), Mission Valley.

Entries for the event, which is CRA-sponsored, are expected from all parts of the Southern California area. Trophies and ribbons will be awarded in all classes.

The first judging of the 20-event show will start at 9 a.m. Included will be English, Western, Hunter and Jumper classes. Thirteen of the events will be for juniors and seven for adults.

A gymkhana event will provide entertainment during the mid-day intermission. C. L. Pogorel, commissioner, said Vince Paul will handle duties of the show manager and Frank Darnell will be the ring master.

Paul asked those who wished to help with the show or register entries to contact him at ext. 2243, Plant 1. Organization of committees and other details will be the subject of a meeting tonight (July 8) at 7:30 p.m. in the home of Frank Darnell, Mission Gorge Rd., Santee.

In other club activities during the past month a barbecue was held June 20 at Lakeside Park for club members who have helped with three or more shows during the past year.

Judo Instruction To Start Tonight In CRA Clubhouse

Judo instructors and students will try out the new mat recently purchased by the Convair Recreation Association for the first time tonight (July 8) in the CRA Clubhouse, 3401 Pacific Hwy.

Set to start at 7:30 p.m. instruction in the manly art of self-defense will be under the experienced tutelage of Tony Silva (Dept. 201), a winner of the brown belt, and Mary Spengler (Dept. 8) who will concentrate on teaching the youngsters.

The workouts will be held every Thursday in the Clubhouse. Pete Beyrer of the CRA office said a 50¢ fee would be charged for club membership for one year. To defray expenses 25¢ will be charged for each workout.

Beyrer said the purchase of the mat would solve problems previously encountered by the club a few months back when workouts were held in the Federal Bldg., Balboa Park and the Gillespie Field gym.

The 20x20-ft. judo mat is covered by a reinforced nylon plastic top. If the Thursday night sessions prove to be too crowded an additional workout will be most likely scheduled on Fridays.



CHAMPIONS — Combined Astro-San Diego Division table tennis team walked away with honors during Rohr Invitational tourney. Shown are Lee Majel, center, of SD, and Astro's Mike Rosenthal and Dick Smith. SD's Val Asuncion was not available for picture.

CRA Sports & Recreation Convairiety

SD Team Tops Entries In IRC Pistol Tourney

The Convair SD Pistol Club set the pace June 28 at the annual IRC Pistol Shoot with teams placing first, third and fifth.

Hosted by the Convair SD group the meet included entries from Astronautics, Convair Palmdale, Rohr and Ryan. A total of 52 shooters participated.

Carrying SD colors to victory on the first-place team were B. L. Broadway (Dept. 603), Ralph Picard (Dept. 6), Jim Halfacre (Dept. 180) and Joe Williamson (Dept. 401). Their point-total of 1,136 was 15 points better than that of the second-place entry.

Broadway led his teammates to the top rung by tallying 292 points, closely followed by Williamson with 290. Halfacre accounted for 285 points and Picard 269.

Scoring on the third-place SD team was led by Roy Groth (Dept. 25) with 281 points. Other members of the team included Bill Dittmann (Dept. 6), Ash Bishop (Dept. 401) and Carl Hornburg (Dept. 166).

Top individual score of the day was registered by D. W. Reichenbacher of a Convair Astro team that placed second in the tourney. Reichenbacher posted a score of 293, one point better than that tallied by B. L. Broadway.

Another Astro team also placed fourth. SD shooters on the fifth-place team were H. W. Holmerud (Dept. 3), Carl Monds (Dept. 115), Jim Baxter (Dept. 3) and W. G. Miller (Dept. 600).

SD also placed a team in the 11th position which was followed by a contingent from Convair Palmdale.

The fine showing of the SD Pistol Club in the tourney followed on the heels of other victories which had been posted by the SD Gun Club in the rifle, trap and skeet events of the Gun Shoot which had been held previously.

★ ★ ★

Selection of a new Convair SD pistol team, based on scores fired in short national matches the last three months, was announced this week by Ash Bishop, CRA commissioner.

The team, which will represent Convair SD for July, August and September, is made up of Williamson, Broadway, Monds and Halfacre.

Reiter Wins Convair Golf Championship

Al Reiter (SD Dept. 115) shot steady par golf in the last round of the Convair Golf Club championship Tourney at Rancho Santa Fe to win the San Diego and Astronautics plant title.

A total of 202 golfers in 13 flights spent three weekends matching strokes in the elimination tournament. The runner-up in the championship flight was Ralph Long (SD Dept. 218).

The first flight winner Russ Davis (SD Dept. 218) shot a sparkling one-under-par 71 on his final round to snag honors in the flight ahead of runner-up J. A. Batson (Dept. 321-3 Astro).

Tourney flight winners and runners-up will receive awards at the Convair Golf Club meeting tomorrow (July 9). Cocktails from 6:30-7:30 p.m. will be followed by a smorgasbord dinner at the Admiral Kidd Officer's Club on Harbor Drive.

Following is list of flight winners and runners-up:

Second Flight: G. Woods (Astro) and J. E. Ross (Astro).

Third: Col. G. E. Bostwick (AFPR Astro) and V. Barger (SD).

Fourth: J. F. Moore (SD) and F. W. Kelly (SD).

Fifth: R. M. Williams (Astro) and M. V. Wisdom (Astro).

Sixth: K. G. Eastin (SD) and L. D. Green (Astro).

Seventh: R. Berner (Astro) and S. Braun (Astro).

Eighth: E. E. Espinoza (Astro) and G. Howell (SD).

Ninth: L. L. Siemers (Astro) and A. J. Uher (SD).

Tenth: F. D. Robbins (AFPR Astro) and L. E. Woll (SD).

Eleventh: R. Romero (Astro) and T. Lazos (Astro).

Twelfth: J. A. Flitter (SD) and R. R. Reid (Astro).

Women's Flight: Lee Stone (Astro) and Marion Wierzbicki (SD).

Star-Light Seats To Go on Sale Mon.

CRA reduced-price tickets will go on sale next Monday (July 13) at 9 a.m. at Convair SD employee services to the next Star-Light Opera production, "Carousel."

A block of 300 seats has been obtained for Convair SD people on the night of July 26. Regular $3 tickets may be obtained at $2.10; $2.50 seats for $1.75.

Dog Show Top Attraction at Club Meeting

SD and Astro folk who own dogs of a hunting breed will have an opportunity to put them on exhibition this month when the CRA Gun Club sponsors a dog show at the July 14 meeting at Gillespie Field.

Fon Johnson, a professional dog handler, will judge the show and trophies will be awarded for the best male and female entered.

Although dogs entered must be of a hunting breed they are not required to possess any special training. They will be judged on conformation only.

Johnson will bring along one of his prize-winning hounds and demonstrate obedient handling after the show. Jack Swank, CRA commissioner, said that if sufficient Convair folk show interest in starting a dog obedience class, the CRA may make arrangements to schedule one in the near future.

Visitors are welcome to attend the show which starts at 7 p.m. Interested parties should submit entries as soon as possible to either Ezra Johnson, ext. 2283, Astro, or Swank, ext. 1161, Plant 1.

Following the meeting, films of bullfighting in Mexico and another concerned with driving an ambulance on emergency calls will be shown by club member, Al Johnson.

Archers Plan Trophy Shoot

A trophy shoot will be sponsored this Sunday (July 12) by the Convair SD Archery Club at the Kearny Mesa Range.

The all-day shoot will start at 9 a.m. and registrations will open an hour earlier. Archers will have a busy day with 28 field targets, 14 hunter and 14 animal targets slated for the shoot.

Members are urged to bring the children along and visitors are always welcome at the contests. In an effort to "beat the heat" all shoots during the summer will start at 9 a.m.

Refreshments will be available at the Kearny Mesa Range for the shoot which will be conducted on a handicap basis.

Archery movies will be shown at the next meeting of the club July 16 in the CRA Clubhouse on Pacific Hwy. Friends of members are invited to attend the 7:30 p.m. meeting.





DERBY WINNERS—Above are youngsters who attended annual Fishing Derby sponsored by SD Fishing Club. Winners who hauled in biggest catches in bottom row are (from left): John Grantham, Richard Ponce, Tom Gilliland, Jim Holland, and John Jones. Below: Mike Clark, derby chairman (checkered shirt), piles awards on table.

Record Amount Of Fish Taken By Youngsters

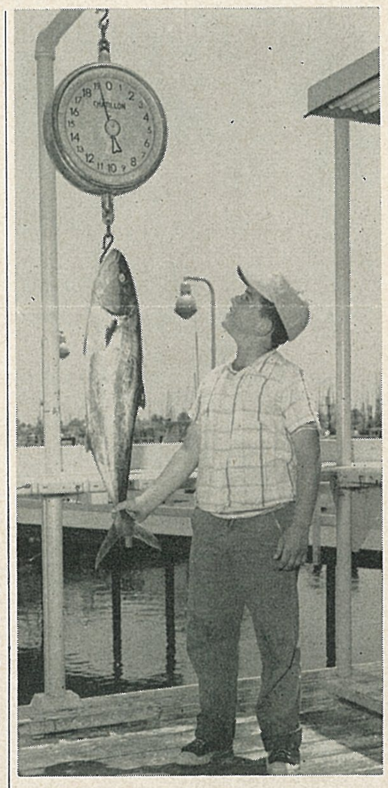
The fish were bitin' and that was all that 51 dads and sons and daughters needed June 20 to make the annual Convair SD Fishing Derby one of the most successful ever held by the CRA Fishing Club.

Veterans of past Fishing Derby jaunts said the number of fish caught this year was by far the greatest.

This year's derby also was marked by a repeat performance of the 1957 winner. Johnny Grantham, 10, son of G. G. Grantham Dept. 230, won the jackpot prize with the largest catch of the day, a 19-lb., 4-oz. yellowtail. His winning fish two years ago weighed 20 lbs., 12 oz.

Other winners were Richard Ponce (son of W. Ponce Dept. 15), Tom Gilliland (son of R. H. Gilliland Dept. 197), Jim Holland (son of J. Holland Dept. 6) and John Jones (son of J. Jones Dept. 600).

Each of the first and second place winners received a salt-water rod and reel and two 200-yd. spools of line. The third prize was a fresh-water rod and reel and line while reels went to the fourth and fifth placers. Many of the other youngsters received tackle boxes.



REPEAT—John Grantham (son of G. G. Grantham, Dept. 230) won top prize second time in three years in annual Fishing Derby. His prize-winning catch this year was a 19-lb., 4-oz. yellowtail.

Winter Keg Plans Now Being Formed

The first call for winter league bowling at Convair SD this week was sounded by Jim Hayman, CRA commissioner.

"Even though summer leagues are rolling full tilt now we have to start thinking about setting up our winter keg leagues," Hayman said.

"To start the ball rolling we would like to hear from all those who are interested in an 825 men's scratch league at University Lanes on Mondays at 6:30 p.m.

"Another league we would like to get organized early is a mixed scratch league at Pacific Recreation on Thursdays at 6:30 p.m. This would be in the 775 and 800 team-average bracket," Hayman said.

For information and entries contact either Hayman, ext. 1155, Plant 1, or Mike Brooks, ext. 583, Plant 2.

Five Convair Men Win in NMA Golf

Five Convair golfers were named winners in the National Management Association golf tournament held last month at Ojai.

Steve Barinka, 880 superintendent and only SD golfer to place, finished seventh in "B" flight.

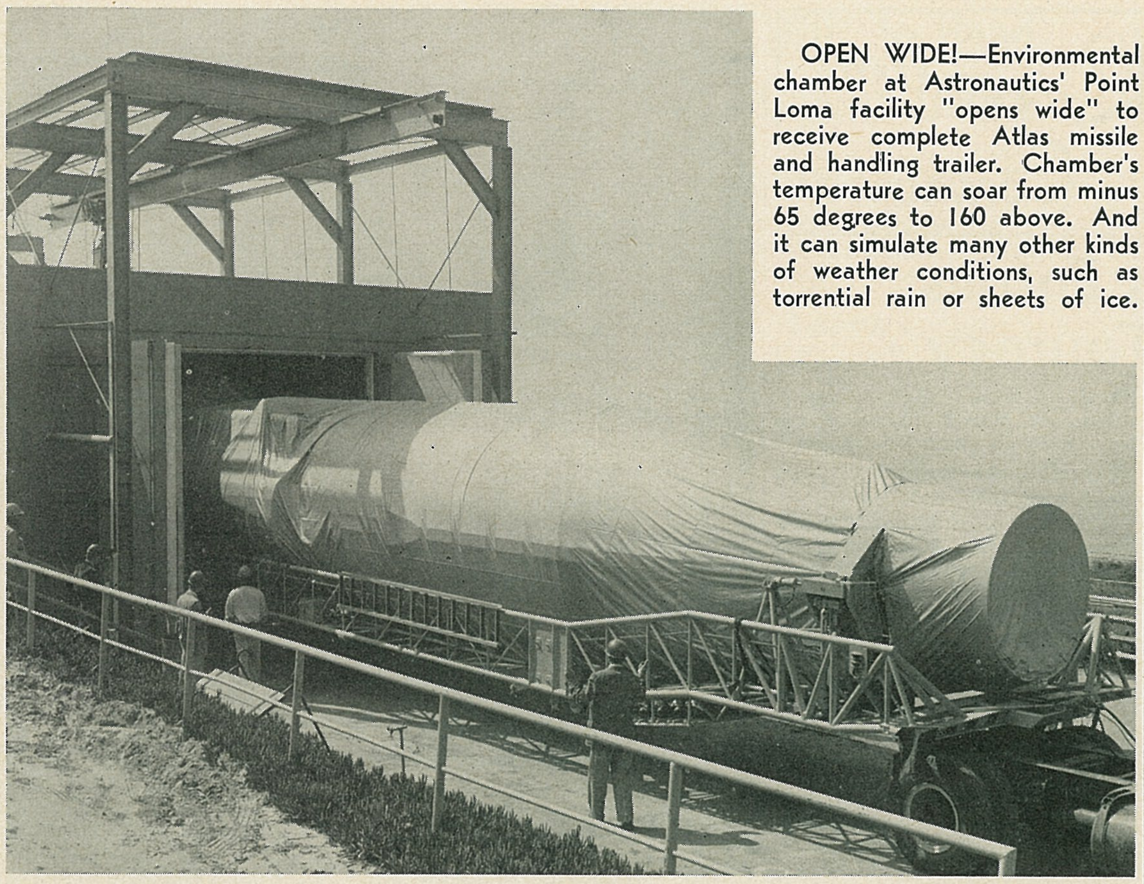
Larry Failor, chief of Edwards industrial relations, was third in the "A" flight; and C. E. Howard of Palmdale placed eighth in the "C" flight.

Other Convair winners were H. Boles of Pomona, first in "B" flight; and G. Blesu of Pomona, 22nd in "B" flight.

'Repair' Talk Set For Car Clubbers

Members of the Convair SD Sports Car Club will hear a lecture on the "Repair of Cars" at the July 15 meeting in the Balboa Park Natural History Museum.

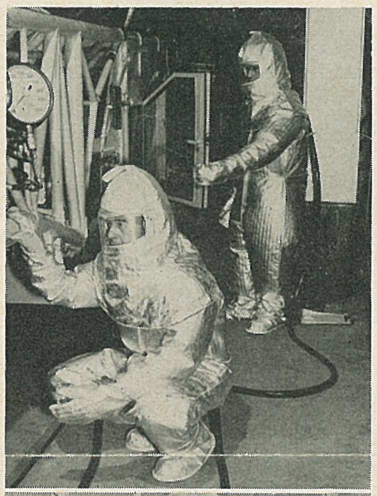
Over 80 club members attended a beach party June 27 at the Model Yacht Basin on Mission Bay.

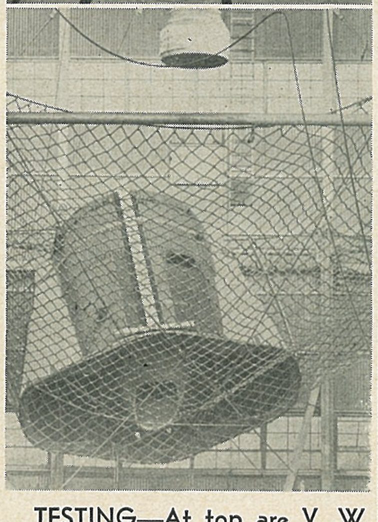


OPEN WIDE!—Environmental chamber at Astronautics' Point Loma facility "opens wide" to receive complete Atlas missile and handling trailer. Chamber's temperature can soar from minus 65 degrees to 160 above. And it can simulate many other kinds of weather conditions, such as torrential rain or sheets of ice.

Huge 'Climate' Chamber Can Freeze Or Bake an Entire Atlas Missile

BY BRYAN WEICKERSHEIMMER
Convairiety News Editor, Astronautics





TESTING—At top are V. W. Palmer and W. J. Harden, both Astro Dept. 756, in asbestos suits for hot work inside environmental chamber. Below, section of missile that normally breaks away in flight takes planned "tumble" into net. Latter operation is conducted in special building where cameras record action. Net prevents damage as sections practice breakaway.

Creating sub-zero cold, tropical heat or duplicating maximum temperatures present when an Atlas missile blasts off are every day chores to a select group of Convair Astronautics men.

These feats are performed regularly by Astro personnel assigned to its Point Loma test site near San Diego.

Since 1954 when Point Loma became the first Atlas missile test site, they have simulated just about every conceivable operation involved in the Atlas weapon system and its support equipment.

Toward this end, Astro has assembled at Point Loma one of the greatest arrays of missile test equipment known to the free world. Some of the jigs and fixtures used are common to all test programs, others have been fashioned specifically for the Atlas program. All are "tools" of the test engineer.

Latest addition is a unique environmental chamber.

Measuring 89 feet long, 20 feet wide and 16 feet high, the chamber can hold an entire Atlas missile and its handling trailer. Or it can be used on single components or groups of components.

The chamber can be turned into a giant "refrigerator" with interior temperatures of minus 65 degrees. And it can become an "oven" with up to 160 degrees heat and 95 per cent relative humidity. A sprinkler system can produce high humidity or icy conditions as required, or it can make "rain" at the rate of five inches an hour. The chamber can also "brew" its own air supply. Closed circuit television makes observation of special areas possible, while peep holes from the control room add to visibility.

However, most large tests require entering the chamber. For these special cold weather gear or asbestos suits are used as necessary. The latter contain their own hose couplings for fresh air.

Current tests are being made on an Atlas handling trailer. All working parts are being checked under temperature extremes. In time, Astro plans to demate, then remate, an entire missile during tests. In the planning stage is a program involving test of a complete van-like missile checkout trailer.

Another building at the site is used for separation tests. Systems which normally break away during flight are hoisted together to the top of a tower. Below, like a giant fish net, is a catching device. Inch-thick rope strands form a strong, web-like netting. About 160 feet in circumference, the net is secured on posts, can be raised and lowered. During tests, as cameras record each step, the break away items are separated, the lower section falling into the net below. In this manner, the same units can be retested time and again.

A smaller building boasts a power sub-station large enough to supply 100 normal homes. It is used for thermodynamic tests.

More than 1,800 heat lamps, arranged in banks, are placed scant inches from the test section. As power is increased, they become concentrated heat sources, duplicating and exceeding temperatures present as the missile builds itself to full speed after blast off.

Aerodynamic tests were performed in much the same way, with small hydraulic cylinders exerting pressure at various points.

Other tests in this area involved umbilical cord operations.

Towering above all other structures at the site is a facility for conducting fuel flow tests on many types of Atlas tanks.

Liquid oxygen is allowed to flow via a special trough to the ocean nearby. The resulting vapors create a ghost-like fog often visible for miles around.



HOT! HOT!—R. C. Hinck, group engineer in charge at Point Loma facility, makes note beside one of many batteries of heat lamps.

SD's Garner Green Attends Testimonial

Garner G. Green, chief structures engineer at Convair SD, was one of the speakers at the recent testimonial dinner held in Los Angeles for Dr. Alfred S. Niles, retiring aeronautical structures professor at Stanford University.

A member of Dr. Niles' first class at Stanford, Green spoke on the well-known professor's early days in aircraft at McCook Field, now Wright-Patterson AFB.

Convair FW Builds Test Duct For Powerful 'Atom Smasher'

Convair Fort Worth may soon be producing some of the components for a 12½-billion electron volt synchrotron "atom smasher" being built in Argonne National Laboratory near Chicago.

A test section of ducting for the inner vacuum chamber of the synchrotron was shipped to Argonne last month.

When the design and fabrication is checked out, Convair hopes to win a contract to fabricate the complete ducting system.

"Convair has a head start in this work because of our prior experience both in nuclear work, and our work in bonding large metal and fiber glass parts on the B-58," said Bob Thompson of manufacturing research and development.

The synchrotron will be used to bombard atoms with electrons that have been speeded up to near the speed of light—186,000 miles per second.

This is done, Thompson explained, by injecting a stream of electrons into the vacuum chamber, then pushing them along by "squeezing" them through an electromagnetic field much as an orange seed can be shot across the room by squeezing it between the thumb and fingers.

The test section was only three feet long. But the production ducting will be 54 feet long and will arc. Eight pieces will join together to form a circle 150 feet in diameter.

The ducting is made of stainless steel and plastic laminate joined in such a fashion that they will hold a near perfect vacuum.

Assisting manufacturing research and development engineers on the project were engineering department's nuclear engineers and materials and processes engineers. Tooling was made by Dept. 81-08. Actual fabrication was performed by the radome section of Dept. 35.

Visitors to SD See 880, F-106

Delegates to the 12th assembly of the International Civil Aviation Organization now meeting in San Diego saw Convair's 880 jet transports and F-106 all-weather jet interceptors move down production lines on their tour of Convair San Diego plants this week.

B. F. Coggan, Convair vice president and San Diego Division manager, welcomed the 120 visitors in the 880 mockup building before the tour Monday (July 6) through Plants 1 and 2. They were briefed on the 880 jet transport by C. G. Wolcott, domestic sales manager.

Delegates to the 30-day assembly of ICAO, an United Nations agency, represent 74 member nations.



ATOM SMASHER—Bob Thompson, left, and J. C. Perry make final inspection at Convair Fort Worth of test section duct destined ultimately for use in "atom smasher" at Argonne National Laboratory near Chicago.

TV Tape Recorder Used To Preserve B-58 Data

Television networks—with their new video tape recording systems—have nothing on Convair Fort Worth.

Identical video tape recorders are getting trial runs this month to adapt them to record test data on electronic countermeasures systems on the B-58 Hustler supersonic bomber.

Convair's two recorders are the same as those used by national TV networks to tape both picture and sound for rebroadcast.

But at Convair Fort Worth, they're used to record and preserve ground radar data obtained during vital B-58 flight tests.

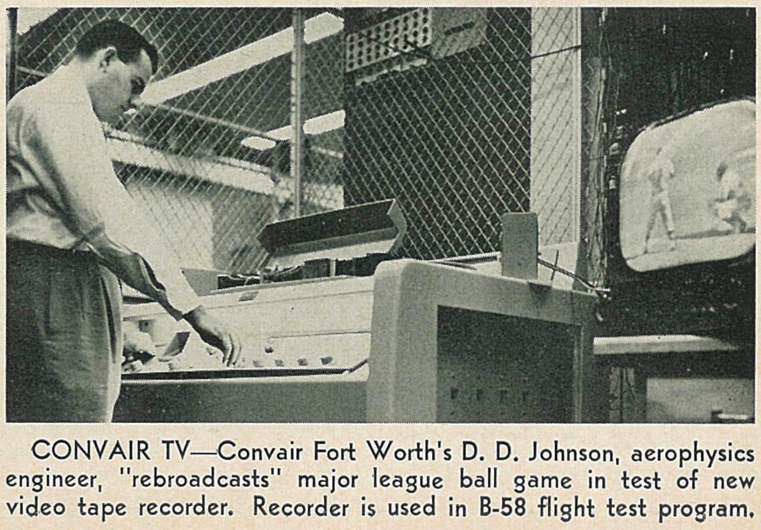
The tapes can be played back immediately—or at a later date—to enable engineers to study results as long as may be necessary.

"The video tape process will result in considerable time and cost savings in the B-58 flight test program," said H. T. Stucker, electronics laboratory supervisor.

"Now that test results can be recorded and studied later on the screen, Hustlers won't need to make as many test runs against ground radars as before."

One of the Convair recorders is located in the electronic systems lab, and the other is to be used in a mobile trailer unit.

Two of the laboratory engineers, D. D. Johnson and A. C Baswell Jr., are performing modifications on the recorders.



CONVAIR TV—Convair Fort Worth's D. D. Johnson, aerophysics engineer, "rebroadcasts" major league ball game in test of new video tape recorder. Recorder is used in B-58 flight test program.

C-V CONVAIR

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.

New York City Defense Joined By Speedy F-106

Convair-built F-106s, newest all-weather jet interceptors, were formally introduced for the first time in ceremonies held last week at McGuire Air Force Base, N.J.

Representatives of the press, television, and radio, and military and civilian dignitaries were impressed as the faster, farther and higher-flying interceptors, first to join the North American Air Defense Command, went through their paces.

First unit to receive the Mach 2 planes is the 539th Fighter Interceptor Squadron commanded by Lt. Col. Reginald I. Hays. In addition to the single-place F-106s delivered to the squadron were two-place F-106Bs, tandem-seated combat version.

The 539th FIS is one of three units assigned to the defense of the New York City area.

Similar in appearance to the F-102, the F-106 is an entirely new all-weather interceptor with advanced armament and electronic guidance systems. When fully integrated into the SAGE System, the F-106 interceptors will be directed automatically on bomber-interception missions by the MA-1 electronic guidance and fire control system produced by Hughes Aircraft Co.

This system can fly the F-106 from soon after lift-off, through climb and cruise to attack position, automatically lock onto the target, arm, and launch the Super Falcon air-to-air guided missiles or Douglas MB-1 Genie atomic rocket at the right instant, and fly the F-106 back home or to the nearest base. The pilot takes over again for landing.

The plane is powered by a Pratt & Whitney J-75 turbojet engine with afterburner which develops almost 50 per cent more thrust than the J-57 in the F-102A. This powerplant drives the F-106 at more than twice the speed of sound in level flight and to altitudes above 50,000 feet.

Range of the F-106 has been considerably increased over other all-weather interceptors now in service.

Like its sister F-102 aircraft, the F-106 is known among pilots as a "forgiving" aircraft because of its exceptional stability in high-speed flight and low-speed ease of handling.

It has a wing span of 38 feet, is 70 feet long, and 20 feet high. First flight was made in December, 1956, and first production model flew in August, 1957, just two years ago.

Other NORAD squadrons are beginning to receive F-106 equipment, now in production at Convair San Diego's Plant 2.

SD's Con-Trib-Club Okays $7,300 Gifts

A total of $7,300 in contributions to charitable organizations was approved at the July 1 meeting of the Convair Employees' Con-Trib-Club Committee at Convair SD.

The Salvation Army will receive $3,800 for operating expenses and Sunnyside Guild, Inc., will get $2,500 for program finances. Two agencies in Antelope Valley, Goodwill Industries and Los Angeles County Association for Mental Health, each will receive $500. Goodwill Industries will use its donation toward the purchase of a station wagon.

Committee members tentatively approved $1,000 to the San Diego YMCA to help finance camperships for 32 needy children who otherwise would not be able to have a camping vacation.



DESERT WINGS—Convair-built F-106, newest all-weather jet interceptor, banks above desert town near Edwards AFB on check-out flight before delivery to Air Defense Command. F-106s are put through production flight tests at Convair Palmdale facility.



NEW STRENGTH—First F-106s to join Air Force as latest weapon system were formally introduced in ceremonies last week at McGuire AFB, N.J. Shown beside F-106 is armament, Genie MB-1, air-to-air nuclear rocket at left, and four Super Falcon guided missiles.

$2½-Million Face Lifting In Final Stages at SD

Rehabilitation of engineering buildings (Bldgs. 5 and 51) at Convair San Diego is in last stages of completion with final clean-up now under way.

With completion of the last construction zone at the east end of Bldg. 5 second floor, the entire second and third floors of both Bldg. 5 and Bldg. 51 have been completely remodeled and the outside appearance of Bldg. 5 improved with a modern exterior.

The $2½-million project, which was begun May, 1958, has seen nearly 3,500 engineers and related personnel relocated in new, modern surroundings.

Last to make their final move were 450 equipment design personnel under P. D. Ferrara, chief design engineer, who came from Bldg. 4 to the last completed area on Bldg. 5 second floor two weeks ago. One of the last in the year-long series of moves was the relocation of 120 blueprint reproduction people on the mezzanine level between the first and second floors of Bldg. 5.

The new auditorium on second floor of Bldg. 5 was to be finished this week, said H. A. Smith, chief plant engineer. Capacity of the hall will be about 150 persons with a small stage and projection facilities.

Contractors, James Stewart Co., will finish cleaning up and be out of the buildings probably by the middle of August, said Smith. Ducting for air conditioning has been extended to all remodeled areas throughout both buildings and as soon as it has been properly balanced, which may take two or three weeks, he said, all Bldg. 5 and Bldg. 51 occupants will be working in controlled air temperatures for maximum comfort.

Standardized office decor has been used throughout both buildings with a uniform color scheme of coral, green, grey, and yellow used alternately on different sec-

(Continued on Page 2)

Fourth Jet 880 To Leave Final Assembly Soon

Two Convair 880 jet transports will be making momentous moves this week within Convair San Diego environs.

Plane No. 4 will be rolled out of final assembly to go to field operations following installation of interior trim, and plane No. 2 will come back to Plant 1 from the seaplane ramp.

The fourth 880 to roll off the assembly line at Convair SD Plant 1 is the first plane to have interior configuration. The plane, destined for Delta Airlines, will join its two sister ships, planes No. 1 and 3, in flight test the middle of August.

Plane No. 2, which has been undergoing intensive structural tests at the SD seaplane ramp location the last seven months, will be coming back into the plant this week for structural and interior changes. According to A. E. Hill, Plant 1 works manager, the plane will not go back into the assembly line but will be located in an outside area for necessary rework.

Following fuel gauge calibration tests last week, plane No. 2 completed its structural test program in a shorter period than anticipated, said W. E. Wise, structures lab group engineer in charge of 880 testing. The plane had been at the ramp since last December. "We credit the tremendous cooperation throughout the entire SD plant with the successful conclusion of the test program ahead of schedule," said Wise. "It was a good plane to work with and a good crew handling the testing, making the best possible combination."

The 880 pressure cycle article (99-4) and 880 pilot's canopy will be undergoing fail-safe and fatigue testing at the ramp during the rest of this year. The test fuselage is now going through 5,000 cycles—equivalent to 5,000 flights—each week in the huge hydrostatic test tank. The tank is then drained and the fuselage inspected. Up until last week the plane had been put through 23,000 cycles.

Plane No. 1, first plane in the flight test program, is back in field operations until the first of August for control systems changes. The second plane to be flight tested, plane No. 3, is still on flight status for general airplane and control systems testing as well as for the preliminary portion of takeoff and landing tests which will provide background information for tests to be conducted at Edwards AFB later in the summer.

RX Into Home Stretch; Only Nine Days Remain

Two Convair Palmdale men won the June "RX" awards. R. E. Gumtz, a foreman in Dept. 321-1, will receive the $1,000 prize and John H. Tanner (Dept. 321-2), an electronic test equipment technician, gets the $500. Tanner is the first hourly employee to win one of the major awards.

★ ★ ★

With more than 5,000 cost reduction ideas submitted so far, the "RX" campaign moved into the home stretch this week.

There are nine days left to send RX ideas direct to B. F. Coggan, SD Division manager, and qualify for special award money.

Coggan, convalescing after an abdominal operation, had this to say:

"With the RX program drawing to a close I wish to express my gratification to all those who have helped make the campaign a success.

"We have proven without a doubt that there are better and less expensive ways of doing our jobs.

"On Aug. 1 the RX program in name will be no more. However, the concept of reducing expense should continue. Both you as an individual and your company will benefit by your taking advantage of the Employee Suggestion and Cost Improvement Proposal programs," Coggan concluded.

E. E. Hartzler, cost reduction supervisor at Convair SD, estimated that about 15 per cent of the total number of ideas submitted during the campaign would be approved.

"A special note of thanks should be given department heads who have cooperated admirably in helping RX researchers estimate the proposals and have taken prompt action on their installation," Hartzler added.

Starting Aug. 1 all proposals should be funnelled again through the normal ES suggestion box system and the CIP program.

Winners of the July RX idea awards are expected to be available for the Aug. 19 issue of **Convairiety.**



NEW LOOK—Engineering building at Convair SD Plant 1 (Bldg. 5) as it now looks following complete remodeling, inside and out. Windowless front facing Pacific Highway is painted in SD plant colors of yellow and brown.

Taiwan Airline Orders Jet 880 And Mohawk Buys Four 440s

Convair announced last week that Civil Air Transport of Taipei, Taiwan, has ordered an intercontinental jet 880 and Mohawk Airlines has bought four Metropolitan 440s.

The 880 is for delivery in 1960. Delivery of the 440s will begin at once.

CAT is the flag airline of the Republic of China and serves major Far Eastern cities such as Seoul, Tokyo, Manila, Hong Kong and Bangkok. H. L. Grundy, the line's president, said the 880 will be called the "Mandarin Jet." The interior will include four buffets for preparation of exotic Chinese cuisine. The plane will have authentic Chinese interior decor.

The intercontinental 880 has a range of 4,210 statute miles and a top speed of 615 mph.

Robert E. Peach, Mohawk president, said the new 440s initially will go into service between New York City and upstate Syracuse, Utica, Rome, Binghamton and Elmira.

The planes will be delivered about one week apart and will undergo modification at the Mohawk headquarters in Utica to provide added baggage space and a lounge at the rear.

Polish Noblewoman Featured Speaker

Convair SD Management Club members will hear Countess Maria Pulaski recount her undercover activities as a World War II espionage agent at tonight's (July 22) meeting.

Countess Pulaski, a Polish noblewoman, will be the featured speaker at the meeting which starts with a social hour at 5:30 p.m. in the Caribbean Room of the El Cortez Hotel.

Star-Light Tickets Go on Sale Monday

CRA reduced-price tickets to the next Star-Light Opera production, "Where's Charley?," will go on sale at employee services at Convair SD Plant 1 and Plant 2 next Monday (July 27) at 9 a.m.

Convair SD night will be Sunday (Aug. 9) A block of 300 seats will be sold to Convair people at discount prices of $2.10 for $3 seats and $1.75 for $2.50 seats.

CONVAIR FAMILY CHOSEN FOR DISNEYLAND AWARD

A Convair SD man and his family have been selected by the Magic Kingdom Club at Disneyland as the July "Family of the Month."

Gerald Green (Dept. 98-8) and his family will receive a free weekend at Disneyland, including accommodations at the Disneyland Hotel and meals in the Gourmet Restaurant.

John Clark Now Physics Chief

Dr. J. W. Bond Jr., chief of physics at Convair San Diego, has resigned to accept a position with the Advanced Research Projects Agency, Washington, D.C.

Replacing him as acting head of the SD physics section of engineering will be Dr. John C. Clark of the staff of R. C. Sebold, Convair vice president-engineering, W. W. Fox, chief engineer, announced. Acting as deputy to Dr. Clark will be Dr. H. F. Poppendiek of the physics section.



John C. Clark

Dr. Clark, a native of Shelby, Ohio, joined Convair Astronautics in April, 1957, as engineering staff specialist, and transferred to General Office a year ago as technical and scientific assistant to Sebold. He previously had been a professor of physics at Michigan State University and with the Los Alamos Scientific Laboratory, Los Alamos, N.M., before coming to Convair.

Dr. Bond, who also has been with Convair since April, 1957, expects to assume his new post with ARPA some time within the next month.

Plant 1 First Shift To Donate Blood

First-shift people at Convair SD Plant 1 will donate blood at tomorrow's (July 23) visit of the San Diego bloodmobile.

It will be stationed between the hours of 10 a.m. to 2 p.m. in Bldg. 4 at Col. E-37, said Ken Wulfemeyer of SD employee services. Wulfemeyer said that he hopes that this bloodmobile visit will raise Convair SD's credit at the blood bank enough to carry through another couple of months.

Tri-Hospital Deduct Begun

Payroll deductions for the Tri-Hospital Fund Drive at Convair San Digeo will be taken out for the first time on the checks issued this Friday (July 24).

The amount withdrawn for both salaried and hourly personnel will appear on the tear-off check stub in the Con-Trib-Club box.

Deductions for General Office personnel have already been in effect the past month.

For employees contributing to the Con-Trib-Club the figure listed will be the total deduction for Con-Trib and Tri-Hospital. For others the amount will represent only Tri-Hospital deduction.

The lumping together of the amounts is necessary because of the great expense that would be involved in making a separate section on the check stub for the Tri-Hospital deduction.



F-108 WING LAY UP—J. P. Scozzari and Richard Welk lay up test panel for F-108 wing in new "clean room" in Bldg. 7, Convair SD Plant 2. Scozzari, on loan from FW Dept. 34, tack welds while Welk (Dept. 250) gets ready to place upper surface skin on honeycomb core.

$2\frac{1}{2}$-Million Face Lifting In Final Stages at SD

(Continued from Page 1)

tions. Work areas are surrounded by 7-ft. high partitions to reduce distraction from traffic and noise in the main aisles.

Cubicle arrangements of desks provides the most economical use of space. Floors in all areas except the laboratories are covered with vinyl tile and new flush-mounted fluorescent lighting fixtures with plastic light diffusers provide well-lighted working areas.

Lobby of Bldg. 5, reached from the Bldg. 19 overpass, has been enlarged and redecorated for a more spacious and attractive entrance. Also, a freight elevator access to the second floor has been provided.

General appearance of the engineering buildings is expected to be maintained at a much higher level, explained SD industrial engineers. All possibility of cluttered-looking areas and hallways has been removed as much as possible with elimination of visible telephone and electrical cords, pictures, coat hangers, fans, and desk lamps, except in a few necessary instances.

However, bulletin boards will be replaced in the main aisles for posting of professional and personal notices. They are now being built and will be ready for installation soon.

The outside of Bldg. 5 has been completely modernized with no windows on the front facing Pacific Highway. The building has been freshly painted in the Convair SD color scheme of yellow and chocolate brown with the yellow enamel panels on the upper half concealing the air conditioning ducting.

SD Management Club Will Not Sponsor Camp Trips for Children

Convair San Diego Management Club will not sponsor camping sessions at Camp Cuyamaca for Convair SD children this year.

C. T. Boyle, chairman of the club committee in charge of arrangements, announced that the Management Club has decided to discontinue the discount offer to children of Convair SD employees. During the last four years, the club has given discounts, or defrayed transportation and insurance fees, for the first 100 children signing for the two club-sponsored sessions.

However, Camp Cuyamaca brochures and registration cards are now at SD employee services, both Plant 1 and Plant 2, for the San Diego community camp, open to all boys and girls between the ages of 8 and 13. Regular price is $17.35 per week, including camping fees, transportation, insurance, and health exam.

Total Number SD Lost-Time Injuries Drop

Safety record at Convair San Diego in the first six months of 1959 has seen a drop in number of lost-time accidents over the same period last year.

With a total of 23,656,160 manhours worked through the end of June, only eight lost-time accidents had been recorded in the division, reported M. C. Val Dez, SD chief safety engineer. During the six-month period in 1958, with 26,056,126 manhours worked, there were 13 lost-time accidents, making a frequency of .499 in comparison with .338 for this year.

Days lost chalked up against SD Division from Jan. 1 to June 30 of this year were 6,198, including the loss of 6,000 days for the accidental death of a Holloman test pilot early this year. (An automatic time charge of 6,000 days is made at each loss of life. The recent fatality of a Plant 2 man will add another 6,000 days to the loss column.) Last year only 1,517 days were lost in the first six months.

There was one more doctor's case last year than so far this year—71 recorded in 1958 and 70 in 1959.

Leading in safety and good housekeeping for the first six months of 1959 is manufacturing control at Plant 1 with five first-place safety awards and three for housekeeping.

Manufacturing control at Plant 2 and 880 fuselage, field operations are tied in second place with seven awards. Close behind are 880 wing and material departments while 880 major, final plastics and Plant 1 fabrication stand in fourth place.

GUARDS' PET TREE AT SD IDENTIFIED

The mystery tree has been recognized!

H. P. Hermenau of Convair SD manufacturing development said that the little tree being cared for by SD guards at the Navy-AF parking lot is a nicotiana glauca or "tree tobacco."

The solicitous guards may be killing it with kindness, Hermenau warned. "Since this species of woody herb is wild, it does not require much water and no food and will likely turn yellow and die if overfed."

There's not much danger of its ever growing big enough to shade the parking lot as its maximum height is around 18 ft. with a spindly stem of two or three inches in diameter.

Design and Test Work on F-108 Progressing

Three subcontracts have been awarded by Convair San Diego Division for manufacture of components for the wing of the F-108.

Two San Diego aircraft firms and one in Indiana have been chosen as second-tier subcontractors, announced W. S. Stroud, special assistant to the division manager of Convair SD in charge of the F-108 wing program.

Solar Aircraft Co. will manufacture the wing leading edges and ventral fins for the Air Force long-range interceptor being developed by North American Aviation, Inc. Rohr Aircraft Corp. received the contract to manufacture F-108 elevons and Twigg Industries of Indianapolis, Ind., will build the wing tips.

An order also was placed this month by Convair SD for one of the largest brazing furnaces in the aircraft industry to be used in the manufacture of the F-108 wing.

The gas-fired furnace will have inside dimensions of 12-ft. wide by 22-ft. long and will be able to braze panels as large as 10 by 20 ft.

Coming from Holden Co. of Detroit, Mich., the furnace will arrive in San Diego in sections. Stroud said that it will probably be installed and ready for operation by the end of this year.

In commenting on Convair SD's activities in the design and production of the F-108 wing, for which it received the contract in January, Stroud said, "Design engineering of the F-108 wing is progressing satisfactorily with engineering test work keeping pace.

"Most significant step recently is the completion of some of the initial templates which will be used to develop the production configuration of the wing," he continued.

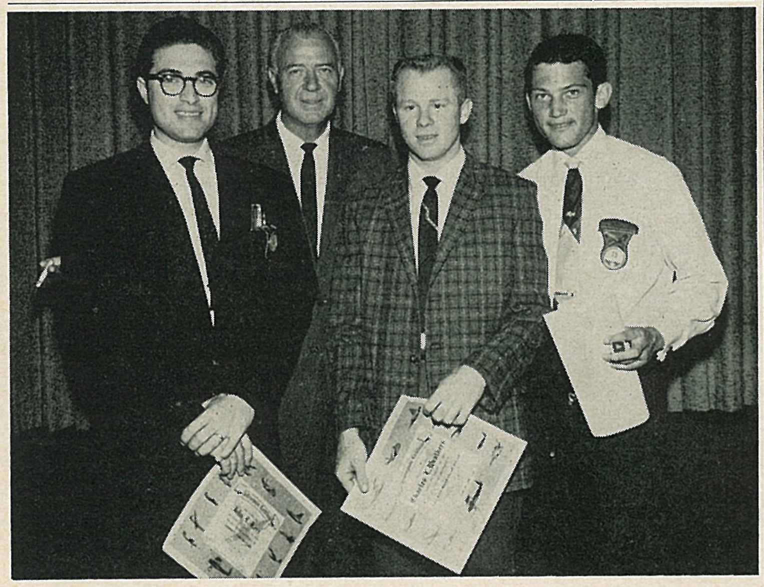
A "clean room" has been completed and is now in operation in the northwest corner of Bldg. 7 at Plant 2 as a dust-free area where parts are being assembled for engineering test specimens.

Rearrangements in Plant 2 for the first production operations of the F-108 wing have seen about half of the west bay area in Bldg. 2 cleared. Eventually the entire west bay will be occupied by the brazing furnace, dust-free rooms, and special equipment required for the F-108 wing.

Employee Services Open Daily at 7 a.m.

Employee services (group insurance, Con-Trib-Club, CRA, etc.) offices at both Plants 1 and 2 are open during the following hours for the benefit of Convair SD folk:

Employee services at Plant 1 is open from 7 a.m. to 6 p.m.; the Plant 2 facilities are available from 7 a.m. to 5 p.m. The offices are open for business during all lunch hours.



GRADUATES—Latest apprentices at Convair SD to complete four-year training program and receive certificates from A. W. Morgan, SD assistant division manager, operations (second from left), were: John Kerr, now in Dept. 6; Charles Weathers, Dept. 600; and Thomas Anderson, Dept. 15.

★ *Convairiety* ★

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SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 2, new plant, ext. 1154. Staff: Bryan Weickersheimmer, news editor.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Is It News?

Call Convairiety

Out-of-Plant Accident Survey Shows Auto Most Serious Offender

During four weeks in June, out-of-plant accidents injured approximately 150 San Diego Division employees, took a heavy toll in lost time and cost nearly $17,000 in group insurance medical bills.

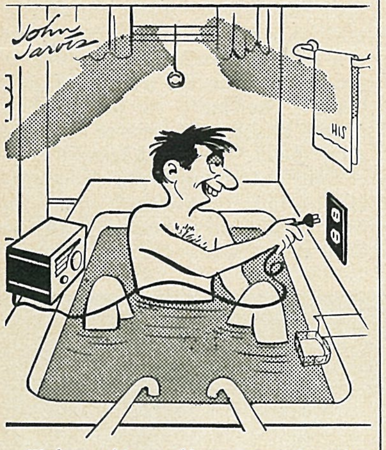
During the same period there were nearly 900 claims for general illnesses for which Convair group insurance paid more than $75,000 in medical expenses.

Convair picks up the tab for the lion's share of all Convair employees' group insurance expenses, in the form of premiums paid to Aetna Life Insurance Co., which actually writes the checks. Employees do contribute to their disability insurance, however, and for life insurance above a certain level.

SD's employee services office reported that the number of accidents was about average for the period, which would mean that at this rate over a year's time SD Division employees suffer nearly 2,000 out-of-plant injuries. (Significantly, during the survey period there were no in-plant disabling accidents whatsoever at SD Division!)

No figures were forthcoming from Astronautics, Pomona or Fort Worth Divisions. However, assuming that the ratio would be roughly the same, an estimate based on relative populations would indicate that for all Convair, out-of-plant accidents would run nearly 500 a month or nearly 6,000 a year.

The SD Division survey was based on employees alone. De-



"I hear this week's program is going to be a real shocker!"

pendent claims usually outnumber those from employees by about 2½ to one, so the accident toll for all Convair families would be considerably higher. The survey involved cases which were ostensibly "closed" during that four-week period, though not all were actually completed because a number of the more severely injured individuals remain in hospital or are convalescing at home, with attendant continuing group insurance expense and lost time.

Of the accidents reported in the survey period, sports injuries numbered 25 (medical cost: $2,-655.47); autos injured 33 (medical cost: $8,231.12); falls hurt 36 (medical cost: $2,082.50); workshop and kitchen mishaps injured 11 (cost: $1,157.50); sprains involved 31 (cost: $1,402.50); and there were 12 miscellaneous (cost: $1,157.50).



Note that although auto accidents amounted to only 22 per cent of the total number, the cost was nearly half of the total group insurance money paid out. Some of the auto injuries were comparatively minor, with costs between $10 and $50. But there were some big ones: $872, estimated off-the-job, two months; $1,255.22, off-job indefinitely; $512, two months; $111, thumb mashed in door; $600, three weeks off.

The "miscellaneous" includes two employees who had stepped on nails. For one of them group insurance paid medical costs of $250. A stubbed toe amounted to a $42 bill. A hernia suffered while pushing a stalled car cost $735 and the individual had been



"Just because I waxed the floors, you don't have to wear spikes!"

off seven weeks when the survey was taken. There were two cases of food poisoning (cost $32). A blow on the mouth ran a bill of $75.

Workshop and kitchen accidents were chiefly minor cuts and bruises, but one wrist, cut on a broken glass, involved medical expenses of $102.50. One workshop injury involved $800 in expenses and an estimated two months off the job.

Most of the falls were under $100, broken wrists, fingers, ribs, back and ankle injuries. However there was a $600 spine injury, the largest in this group and a fall that caused a $166.50 eye injury and a month off the job.

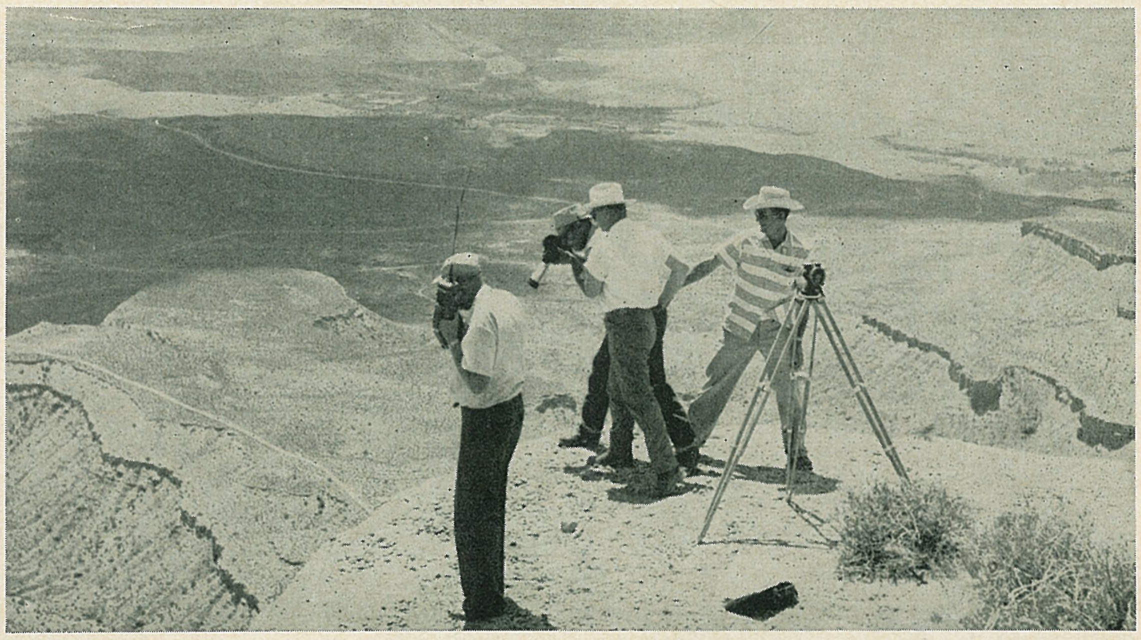
Sprains from lifting various heavy objects around the home were prevalent, about 20 per cent of the accident total. Most of these were under $75 each in medical cost. The most serious, suffered during yard work, has cost $185 in medical costs so far and the individual is still off the job.

The "sports" classification contained one truly serious accident,



"Don't you know better than to leave a loaded weapon where a child can find it?"

a gun shot wound suffered while hunting, with $1,500 medical expenses and an estimated three months off the job. There were four knee sprains while bowling (about $25 each); a fractured jaw suffered in a volleyball game ($150) and a soccer injury that meant $67 and ten days off the job. There were three water ski injuries and two involving horses. Swimming accounted for a half dozen accidents. The most serious was a $165 head injury received while diving. There were five "ball playing" injuries, one of which cost $85.



MOVIE MAKERS—Here is motion picture crew at Hurricane Mesa shooting over edge of 1,500 foot cliff at parachutes which landed in valley. Wearing white hat is Jerry Ratliff, Convair Fort Worth motion picture director.

New B-58 Escape System Test Series Under Way

First in a series of new B-58 escape system tests by Convair Fort Worth crews got under way this month at Hurricane Mesa, Utah.

Tests are being conducted with a rocket-powered sled carrying a nose section of a Hustler taken from the Convair Fort Worth assembly line.

During the first run, the sled scorched along rails which end at a 1,500-foot cliff overlooking the mesa's scenic valley floor. Dummy passengers were ejected from crew stations at high speeds and parachuted into the thickets and wilderness below.

According to J. E. Hickok, project test engineer, two stages of rockets were used for the 14,000-lb. firing weight of these first tests. The sled traveled at about 204 feet per second.

He said the second stage of rockets was set off about 100 feet after the first. At 200 feet beyond that, the No. 2 ejected. At 200 feet more, the pilot's station ejected.

While the tests are going on, engineering motion picture people are busy grinding away thousands of feet of film for later study.

Jerry Ratliff, engineering motion picture director, said his crew has cameras stuck away in every possible place and at every angle during a run.

Recovery of the ejected items after the test isn't easy, according to Hickok. Bulldozers have to be used to make roads to the spots where they land. High boots must be worn for protection from rattlesnakes.

Hickok said the first tests this month were successful. The test series consists of 12 scheduled sled runs in the development part of the program and three scheduled runs for the qualification part.

Ken E. Thompson, a Convair Fort Worth test engineer, is remaining at Hurricane Mesa until the project is complete. Convair also has two full-time test lab mechanics on hand with him. They are G. Cain and J. N. Baldauf of Dept. 36.

Hickok and the movie people are on location only when the tests are under way.

Those remaining for the entire program are living at nearby St. George, Utah, a town of about 5,000 in the proximity of the Zion National Park and the Virgin River.

The mesa's elevation is 5,000 feet, and the weather is generally hot, dry and clear, with about five inches of rainfall a year.

FW Mfg. Research Chief Will Speak

Convair Fort Worth's E. W. Feddersen will speak at tonight's 8 p.m. meeting of the Institute of the Aeronautical Sciences in the Arlington State College engineering auditorium.

Feddersen, chief of manufacturing research and development, will talk on concepts and applications of manufacturing research. He also will trace the growth of aeronautical engineering from the time of the Wright brothers.

Coggan Recovering Following Surgery

B. F. Coggan, Convair vice president and Convair San Diego Division manager, is home recuperating from a recent abdominal operation performed at Scripps Memorial Hospital.

His condition is described as "most satisfactory." His doctors are of the opinion that he will be able to return to work within the next two or three weeks.

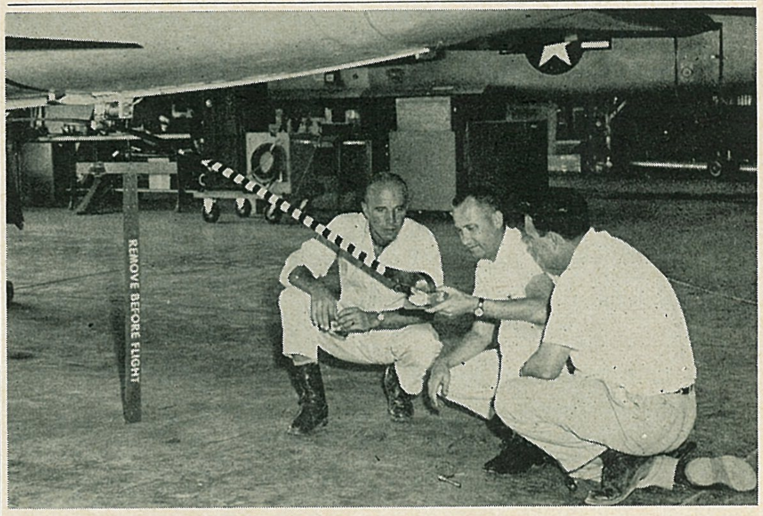
Surgery was of a corrective nature and disclosed that there was no malignancy.

Movies on Missiles Shown to Thousands In So. California

Literally thousands of people in schools, service clubs and other groups have seen motion pictures of Convair's missiles during the first half of 1959, C. D. Cornell, special assistant to the vice president and manager, Convair Pomona, said.

Over 9,000 people have seen "Terrier, the New Fleet Weapon," 22,500 have seen "Atlas 12A," and over 11,000 have seen "Atlas Satellite." The three films were shown a total of 211 different times, 107 times in schools and 104 times as community relations gestures. Most of the showings were in Southern California.

The films are shown regularly as a part of Convair Pomona's junior science school visitation program, and they are also available upon request to clubs and other groups. Inquiries should be addressed to Cornell, ext. 3202.



NEW TAIL HOOK—Left to right, Charles E. Myers Jr., chief test pilot at Convair Edwards; Carl Pieper, assistant flight test engineer; and Tom Buchanan, control engineer, inspect new type tail hook installed on F-106 at Edwards facility, where new arresting system is being put into operation.

F-106s Get Tail Hooks For Fast Stop System

Convair F-106s will be the first Air Force aircraft to be equipped with a new-type "water squeezer" arresting system which tests show is twice as effective as the former chain barrier type.

A contract for spring steel arresting hooks for installation on F-106s has been awarded by Convair to All American Engineering Co. of Wilmington, Del., developers of the system.

The hook, named the Sheaffer Spring Hook for its inventor, is designed to operate in conjunction with the company's runway cable arrest system. First installation at a United States AF base is now in operation at Edwards AFB.

Successful tests of a prototype hook on a F-106 jet interceptor were completed this month at Edwards. The hook has been approved as standard equipment on Century Series aircraft at ADC bases.

The AAE hook, a strip of spring steel, is secured to the underside of the jet, held flush and under tension. When the pilot pushes a button, the hook springs into its lowered position for engagement.

Similar to the system used for landings on aircraft carriers, the hook engages a cable which runs across the runway. The cable, in turn, is attached to pistons inside two 1500-ft. steel tubes, partially filled with water, buried on each side of the landing strip. The landing plane thus drags the pistons through the water, bringing it to a quick, but smooth, halt.

The tail hook system has proved completely effective without damage to aircraft in comparison with the chain barrier system—a heavy cable designed to arrest the plane by catching the wheels—which often resulted in injury to the aircraft.



RUNNERS-UP—Believe it or not, these seven lovely daughters of Convair Fort Worth families failed to win recent Ridglea Swimming Pool Association beauty contest. In group are Judy Starnes, Jo Ann Perry, Judy Tkac, Anne Busey, Kathy Schenck, Dale Dahlberg and Patricia Penn.

'Speech Reading' Solves FW Mechanic's Deafness

Talking on the telephone fascinates Convair Fort Worth's F. C. Riley, who's been living in a world of silence since birth.

Riley, a structures mechanic in Dept. 58, "speech reads" fluently and is soft-spoken and distinct in his own speech. ("Speech reading" is the term now used instead of "lip reading.") He even talks on the telephone by "listening" to vibrations.

Speech therapists at TCU's Speech and Hearing Clinic marvel at the progress he's made. Riley started learning to speech read at TCU a little more than a year ago.

Efforts to conquer his handicap started back in 1931 when he enrolled at the old Van Zandt School for the Deaf at 11 years of age. Here he studied sign language until he was 14 years old, then went to Austin to the Texas School for the Deaf.

When he came to Convair 13 years ago, Riley could hardly make himself understood, but he didn't give up.

At the TCU Speech and Hearing Clinic he has been working with Mrs. Ernest Lawrence, a member of the TCU faculty.

"Mr. Riley has come a long way in a short time," Mrs. Lawrence commented. "And you must realize that he came to us after he had entered his thirties!"

When asked if he had any special hobbies, he grinned and said: "Yes. Talking!"



HELLO! — Convair Fort Worth's F. C. Riley of Dept. 58 has been deaf since birth but is now able to understand others and to talk fluently himself.

Two Convair Actors Appearing in 'Suds'

Two Convair employees are in the cast of "Suds in Your Eyes" now playing its 12th season at Coronado Community Theater.

Richard A. Martin of Astro's Dept. 531-1 and Bert Horner of San Diego Division's Dept. 6-51 are alternating in the role of "Wilson." Martin also played the role last year.

Convair Samaritan Group Wins Award

A flight safety award has been won by a Military Air Transport Service unit flying Convair C-131 "Samaritans."

The 1st Aeromedical Transport Group headquartered at Brooks AFB, Texas, has received the MATS outstanding achievement award in flying for 1958. The group has been flying the Convair-built "flying hospitals" for over two years.

Accepting the award from Col. E. J. York, chief of staff, Western Transport Air Force, Travis AFB, Calif., was Col. L. B. Matthews, group commander.



"Jack's wife doesn't make his work shirts! Pete's wife doesn't make his work shirts, Art's wife doesn't—"

TWA Sends Key Men to Convair For 880 Class

Convair SD is hosting TWA maintenance personnel here for the first six-week training courses for the Convair 880.

SD manufacturing as well as customer service will assist in the training program as TWA representatives will be observing 880 factory processes in detail as a part of their on-the-spot training.

"Our aim is to provide a program tailored to the requirements of TWA and our other customers," said L. J. Bordelon, chief of transport service. "We have worked closely with the TWA organization in preparing this effort during the past two years."

Bordelon welcomed 39 TWA instructors, supervisors, maintenance foremen last Monday morning (July 13) as they arrived in San Diego from five key locations where 880s will eventually be serviced—Kansas City, New York, Chicago, Los Angeles, and San Francisco.

The group is now divided into two classes, explained Don Maxion, SD regional field representative in charge of 880 customer service training. Part are entered in the aircraft systems program and the rest in the electrical course. TWA program coordinators are C. K. Sharp and M. E. Maltby, both of Kansas City.

Next TWA classes, a course on the 880 power plant and one on electronic systems, will start the first part of August while Delta training will begin the end of that month. The TWA courses will be repeated later in the fall for other groups.

Classes for 880 customers will be running continuously for different airlines during the next nine months, Maxion said.

SD Assembler Killed In Bay Door Accident

Russell L. Beard, hydraulic assembler at Convair SD Plant 2, was fatally injured July 9 when a missile bay door of an F-106 interceptor snapped shut.

Beard was repairing a malfunction of the bay mechanism with his head and shoulders inside the plane when the bay door tripped shut. Officials said that he apparently thought the lever operating the doors was set to hold the doors open. He was dead on arrival at Mercy Hospital.

A native of Kansas City, Kan., Beard had been with Convair since July, 1950. He was a retired Navy chief machinist in submarines with 30 years' service.

Larry Hayes Named Jr. Achiever Head

Convair Fort Worth's Larry Hayes has been elected new president of the board of Junior Achievement of Tarrant County.

Hayes, administrative assistant, was elected at a combined meeting of the board and corporation.

Division Manager Frank W. Davis and M. J. Scott of the FW suggestion section are also on the Junior Achievement board of directors.

New City Manager Given Tour of Plant

New City Manager L. P. Cookingham got a hearty Texas welcome recently as Division Manager Frank W. Davis showed him and Mayor Tom McCann through Convair Fort Worth.

Cookingham and Mayor McCann were flown to Convair by helicopter from Bell Helicopter Corp. They were shown around by Marion L. Hicks, assistant division manager, J. T. Cosby, B-58 program director and manager of customer service, and B. G. Reed, assistant division manager.



EXHAUSTING—Doris Jean Suitonu (Convair SD Dept. 603-9) is professional Tahitian dancer. Average performance lasts but two minutes because of strenuous hip swinging and muscle-tiring movements. Other members of act are husband Peter (on left) and Opi Fule. Photo by Ed Tice.

Hard Work

Tahitian Dances Exhausting; Two Minutes and You've Had It

A two-minute Tahitian dance can be more exhausting for a performer than sixty minutes of playing time for a football star.

Take it from Doris Jean Suitonu (SD Dept. 603-9) who is "Manutani" of the professional dancing team, "Manutani and Peti."

"Two minutes is about all I can take at the present time," Doris Jean said. "After that my muscles stiffen tighter than a drum, especially in the legs and thighs."

And that's after more than a year of almost daily practice and a two-month trip to Samoa where she had a first-hand opportunity to observe the intricacies of the dances.

"Some people tend to confuse the hula and the Tahitian dances when there is actually no real similarity other than the grass skirts. The Tahitian dance is much more strenuous and the hips have to move much faster.

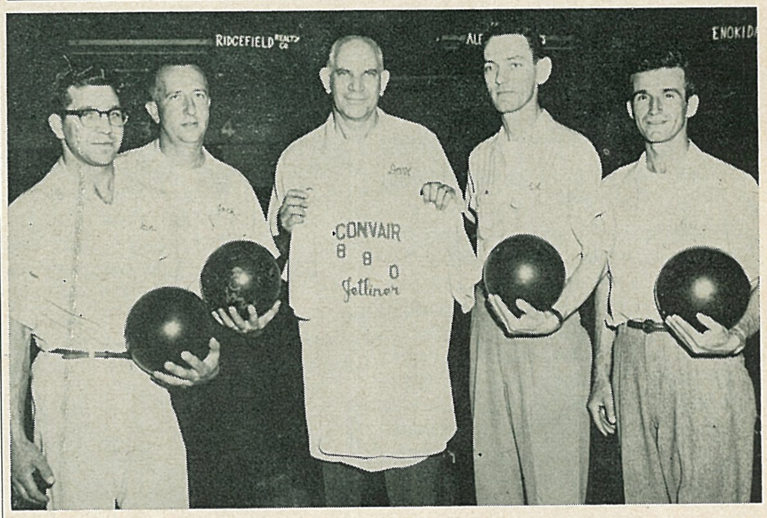
"We strive to keep our performance as authentic as possible," Doris Jean said. "Commercialism in a dance such as this tends to destroy its native origins."

The other half of the act is Doris' husband, Peter. A Samoan by birth he gets the act off stage with a dramatic flourish, the Samoan knife and fire dances.

Doris has also tried her skill at the latter dances but is convinced they can be quite dangerous for the novice. Her husband generally performs the knife dance with another male partner, Opi Fule.

"Those knives are sharp, there's no doubt about that. The success of the dance depends for the most part on a keen sense of timing and balance. Particularly when the partners swing the knives in sweeping arcs at each other's head. You have to be positive of the exact split second to duck your head," Doris added.

They have appeared frequently on stage at various events in San Diego, most recently at the San Diego County Fair.



880 JETLINERS—Even though far from San Diego, there's an 880 Jetliner team bowling in Washington, D.C., Major League (scratch). Members are, from left: George Antonacci of Andrews AFB, Capt. Don Mercer of Bolling AFB, Dave Weitzman of Convair SD transport field service, Sgt. Edward Dwyer of Andrews, and Sgt. Joe Piepoli of Bolling. Their high three-game series is 2,974 and high one-game score is 1,054.



DELTA VISITORS—C. E. Woolman, president of Delta Air Lines, and T. P. Ball, the airline's superintendent of flight operations, flew for first time recently in Convair 880 jet airliner. Delta will receive the first of 10 880s it has on order in January. From left: Woolman; Don Germeraad, chief engineering test pilot at Convair SD; Ball; and D. H. Digges, special assistant to Convair SD Division manager. After the flight, Woolman termed 880 a "sweet airplane."

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

* * *

Stromberg-Carlson Awarded Extension of SCATE Contract

ROCHESTER — A $1½ million extension of a subcontract for SCATE (Stromberg-Carlson Automatic Test Equipment) for testing the electronic portion of the Nike-Zeus missile has been awarded Stromberg-Carlson Division by Bell Telephone Laboratories, according to George A. Peck, vice president and general manager of Stromberg-Carlson's Electronics Division.

SCATE is a flexible system which can be used to check complex electronic systems automatically and to pinpoint any faults which are discovered. Using a building block concept, SCATE reduces the cost and time of designing test equipment individually for each weapon program, Peck said.

The Nike-Zeus award specifically is for continuation of work on the application of the radio frequency portion of SCATE to test the missile's guidance system. Part of an overall system, it checks the response of the missile for frequency, power, triggering sensitivity, time delay and other features.

SCATE can reduce a typical 12-hour manual testing program of a modern weapon electronic system to less than five minutes.

Free from human error, it conducts a complete program of thousands of tests on any missile, aircraft or ground electronic system.

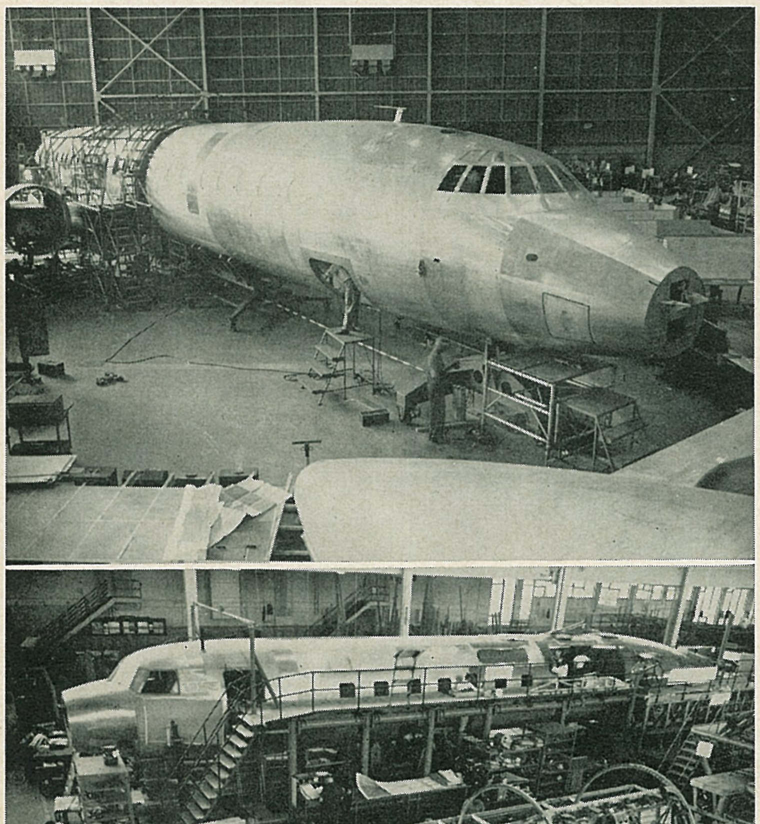
Development of SCATE began six years ago when Stromberg-Carlson designed test equipment for its own use in the inspection of electronic equipment being produced for the armed forces.

Common circuits in various types of test equipment later were reduced to standard block form using solid state devices. Now with only the addition of special stimulus generators and output converters, specific to the equipment under test, SCATE can become quickly adapted to virtually any electronic system.

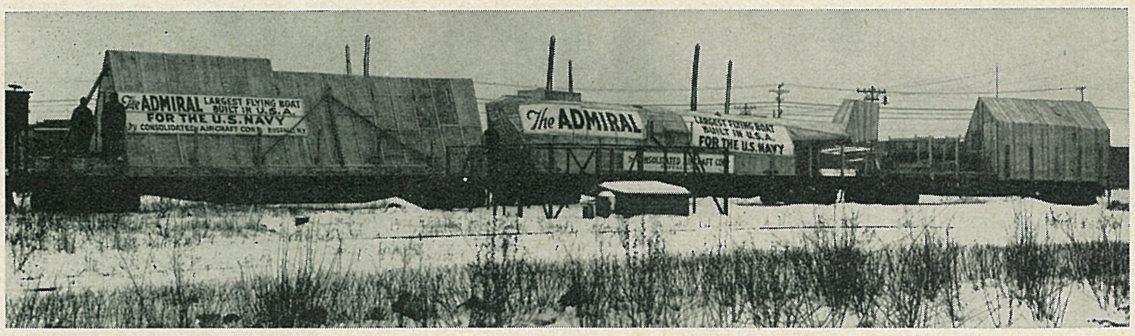
For the past three years Stromberg-Carlson has been engaged in the development and production of a large-scale semi-automatic test facility for checking the guidance system of the Atlas missile. This equipment was designed to provide factory, missile assembly-area and prelaunch check-out.

TACAN test sets to check the airborne tactical air navigation equipment, and TACAN beacon test monitor and control systems were among specific test equipments developed using initial work on SCATE as a basis.

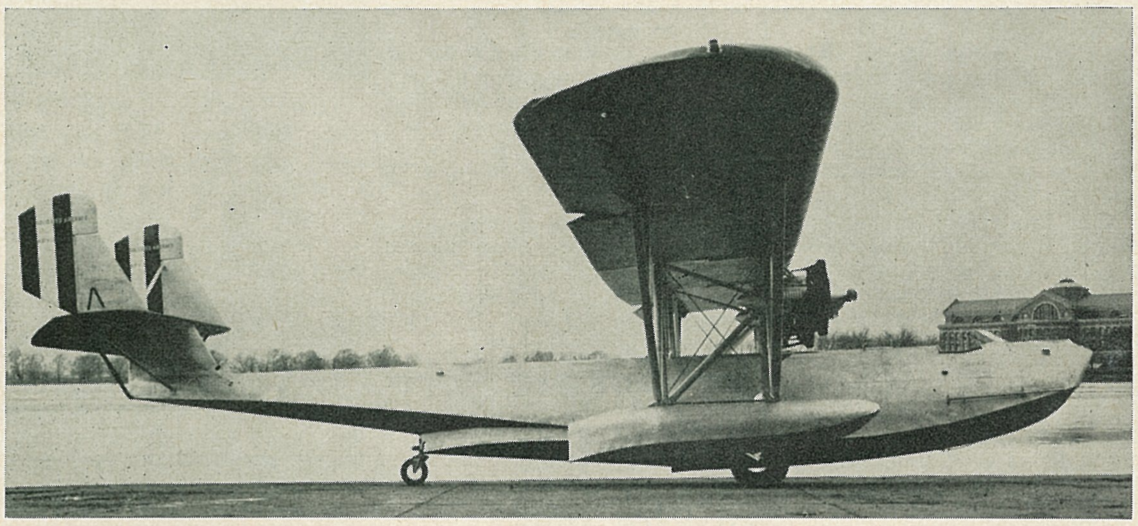
Development is now under way on the application of SCATE to testing the electronic system for a new military jet aircraft.



IN PRODUCTION—Canadair's first CL-44 jet-prop transport on production line at Montreal is well on way to completion. CL-44 will carry 65,000-lb. payload at nearly 400 mph. RCAF has ordered 12 and 15 have been sold to U.S. cargo lines. Plane is powered by four Rolls-Royce Tyne jet-prop engines.



OFF FOR ASSEMBLY—Billed as "The Admiral, largest flying boat in USA," XPY-1 was sent in sections by rail from Buffalo to Washington Naval Yard because Lake Erie and Niagara River were both frozen over. Photo was taken day before Christmas, 1928.



THE XPY-1—This was flying boat which won Navy design contest—but Martin won Navy contract to build.

Information, Please? Just Call Convair

There's at least one woman living in San Diego who must think Convair employs a variety of experts in all fields.

Lucile Learned, a Plant 1 SD switchboard operator, received a call and a woman asked:

"How long does it take a cat to have kittens?"

"Sixty-three days," Lucile, who is somewhat of an authority on cats, replied automatically. Then she quickly added: "This is Convair. Whom are you calling?"

"Oh!" the voice replied. "I thought this was the veterinary's office . . . but thanks for answering my question."

Firemen Given Navy Briefing

Convair SD Fire Chief H. C. Lyter and several of his lieutenants are at Miramar Naval Air Station today (July 22) witnessing a fire demonstration and receiving a briefing on the base's fire training program.

Commanding officers of the Convair SD fire department and two security officers were expected to make the trip, said F. G. Merritt, chief of SD industrial security. The security officers were sent especially for the arson phase of the training. Included in the day's program will be a structures fire fighting demonstration.

The visit is a part of a reciprocal program Convair SD's fire department has developed with other units in the San Diego area, including those of North Island NAS and the Coast Guard.

Approximately 60 Navy and civilian personnel of the Miramar fire department made their first visit to Convair San Diego the first of the month when the SD fire department sponsored a two-day tour of Plants 1 and 2.

Payne Johnson Named Public Relations Head

SAN DIEGO—Appointment of Payne B. Johnson as head of advertising and public relations for Stromberg-Carlson here has been announced by Dr. Donald G. Wilson, general manager.

An advertising and marketing graduate from the University of Southern California, Johnson has been previously affiliated with KFSD-NBC radio, the Phillips-Ramsey Company, San Diego, and the publicity department of Southern California Edison Company in Los Angeles.

XPY-1 Design Won Contest But Martin Won Contract

(Following is installment No. 13 in a continuing history of Convair.)

At Dayton in 1928 I. M. Laddon's Consolidated Aircraft engineering staff was at work on a Navy design competition calling for a huge flying boat of more than 80-foot wing span, to have a fuel capacity of at least 750 gallons. RAdm. W. A. Moffett, chief of the Bureau of Aeronautics, announced that a plane meeting these specifications would be capable of flying non-stop from the West Coast to Hawaii, a distance of more than 2,000 miles.

Laddon designed a twin-engine monoplane of 100-foot span, having an all-metal hull whose configuration derived from the Navy's transatlantic NC boats of 1919. The plane was hurried to completion at Buffalo in December. Since both the Niagara River and Lake Erie were frozen, it was crated on flat cars and shipped to Washington Naval Yard for assembly.

The XPY-1 was test flown off the Anacostia River Jan. 22, 1929. Civilian seaplane pilots were few and the Navy supplied Lt. W. G. Tomlinson to handle the controls. (He subsequently broke in William B. Wheatley, Consolidated civilian pilot.) Those aboard included Laddon, who always insisted upon making the first flight in any plane of his design; Edward P. Warner, Assistant Secretary of the Navy for Aeronautics; and Capt. H. C. Richardson, USN, designer of the NC boats, who filled the navigator's berth.

The big plane "roared down the river on a 10-mile wind . . . lifted easily after a 650-foot run, and climbed quickly," the New York Times reported. The flight went well. Richardson told a reporter later: "The boat is very stable. It felt good to have something solid under foot."

The Times quoted Navy officials as saying Warner hoped, in buying the XPY-1, to foster development of large flying boats for commercial lines. This was ironical, because Consolidated President Reuben Fleet was soon fostering a large commercial airline to develop a customer for his flying boats. About that time, however, the Navy awarded the contract for nine production models of the XPY-1 to Glenn L. Martin Co.

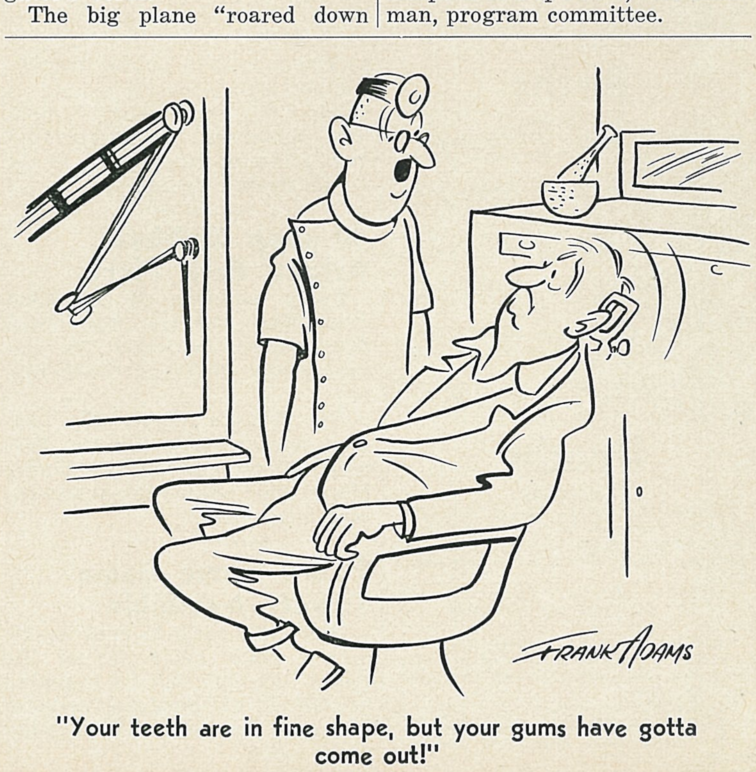
("They underbid us a half million and lost a million on the job," Consolidated men were still saying a quarter of a century later.)

Edmondson Named To Tool Committee

Convair Fort Worth's F. L. Edmondson has been appointed to the national technical publications committee of the American Society of Tool Engineers.

Edmondson is an assistant supervisor in tool planning.

Other Convair people on society committees include A. E. Unruh of Dept. 23-2, chairman of the membership committee, and F. P. Simpson of Dept. 24-7, vice chairman, program committee.



"Your teeth are in fine shape, but your gums have gotta come out!"

Gun Club to 'Break in' Walkways For First Time at Shoot Sunday

New cement walkways at the Gillespie Field Gun Club facility will be put to use for the first time this Sunday (July 26).

The walkways, which are marked off for handicap shooting, have just recently been completed.

The July 26 trap and skeet shoot will begin at 9 a.m. Shooters will compete for turkeys and merchandise awards. All those interested are invited to try their luck.

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Over 100 dog lovers from Convair SD and Astronautics attended the first dog show and obedient handling demonstration held by the CRA Gun Club at Gillespie Field July 14.

Jack Swank, SD commissioner, termed the event "highly successful." It was held in conjunction with the club's monthly meeting.

Seventeen dogs of hunting breeds were entered in the show which was judged by Fon Johnson, professional dog handler. Trophies were awarded for the best male and best female entered. Dogs were judged on conformation only.

Judged the best female entered in the show was a German shorthair, "Friday," owned by Manford Davis (Dept. 401). "Kelly," an Irish setter owned by Jack Rogers (Dept. 6), placed first as the best male entered.

★ ★ ★

At a shoot staged by the Gun Club July 5 contestants from SD and Astro split the honors in half with SD participants taking all three places in the trap event while Astro did the same in the skeet category.

Placing first as the leader of the SD trap contingent was George Clayton (Dept. 115) who broke 25 straight targets. Jay Cushman (Dept. 146) was second and Mary Reuther (Dept. 216) third.

The three skeet winners from Astro were led by Leo Bernitz (Dept. 250), followed by Julian Singleton (Dept. 545) and Hank Johnson (Dept. 321).

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period July 16 through July 31.

Twenty-year: Dept. 188, W. D. Chatham, James Hogan.

Fifteen-year: Dept. 15-1, Nora L. March; Dept. 25-2, Albert Davis; Dept. 31, F. J. Froshaug, E. D. Ingold, Julius Singer; Dept. 44-1, Lucy S. McMinn; Dept. 98-6, I. F. Rollins; Dept. 123, I. J. Pollack; Dept. 171-0, Leonard Davis; Dept. 192-5, Sarah E. Smerdon; Dept. 197-1, Edna P. Miller; Dept. 288, T. J Gaffney, F. P. Hernandez.

Ten-year: Dept. 1-61, J. G. Zevely; Dept. 2-3, W. R. Lee; Dept. 3-1, L. G. Reeb; Dept. 6-51, C. A. Dreher, J. L. Hanson; Dept. 8-1, A. G. Hedlun; Dept. 21-2, K. E. Trondle; Dept. 25, E. G. Fleming, R. F. Graham, C. W. Rigney.

Dept. 31, Cecilia A. Hoagland; Dept. 44-2, Ruth A. Louden; Dept. 93-8, I. J. Earle; Dept. 110, L. L. Orr; Dept. 115, R. J. Faucher; Dept. 123-0, E. J. Dyson; Dept. 188, Dorothy H. Mills, R. L. Schahn.

Dept. 216, Grace W. McDaniels, Addie M. Wooters; Dept. 218, Myrtle B. Beauchamp; Dept. 223, F. A. Peer; Dept. 230, A. M. Samayoa; Dept. 231, C. N. Berger, W. W. Deuel, Annie S. Hogue, R. A. Lobo; Dept. 280, E. H. Beck; Dept. 600-6, L. H. Brewer.

Retirements

SAN DIEGO

BAKER—John C., Dept. 215. Seniority date Aug. 14, 1947, retirement effective July 11, 1959.

DAW—William C., Dept. 216. Seniority date June 17, 1952, retirement effective July 8, 1959.

DENT—Lurana F., Dept. 215. Seniority date April 17, 1952, retirement effective July 7, 1959.

McCLINTOCK—James R., Dept. 215. Seniority date Sept. 17, 1947, retirement effective July 6, 1959.

SALTZGOBER—Jay W., Dept. 25-9. Seniority date Dec. 15, 1950, retirement effective July 6, 1959.

SCOTT—Harrel R., Dept. 188. Seniority date Feb. 28, 1951, retirement effective June 30, 1959.

SHOUPE—Charles W., Dept. 406. Seniority date May 27, 1940, retirement effective July 8, 1959.

Promotions

SAN DIEGO

Promotions to or within supervision effective July 6.

Dept. 6, Engineering: To dynamics group engineer, L. G. Barbee. To electrical group engineer, J. H. McKim. To asst. research group engineer, G. E. Coffey, R. L. Mador.

Dept. 160, 880 Final Assembly: To foreman, J. T. Mitchell.

Births

SAN DIEGO

BENSON—Daughter, Cindy Louise, 8 lbs., born July 4 to Mr. and Mrs. Al Benson, Dept. 6.

LOVELL—Son, Randal Wayne, 7 lbs., 8¼ oz., born July 5 to Mr. and Mrs. Ray W. Lovell, Dept. 6.

MATHEWS—Son, Peter, 8 lbs., 12 oz., born July 4 to Mr. and Mrs. Tom Mathews, Dept. 15.

MILLSAP—Son, Guy Millsap, 6 lbs., 13 oz., born July 12 to Mr. and Mrs. Ray Millsap, Dept. 25-4.

STALEY—Son, Ronald Francis, 8 lbs., 3½ oz., born June 30 to Mr. and Mrs. R. F. Staley, Dept. 400.

WEBSTER—Daughter, Tracey Lynn, 7 lbs., 9 oz., born June 27 to Mr. and Mrs. H. T. Webster, Dept. 6.

Deaths

SAN DIEGO

BEARD—Russell L., Dept. 267. Died July 9. Survived by wife, Margaret; stepdaughter, Margaret; mother, four brothers, three sisters, two grandchildren.

FLYNN — Mina A., Dept. 407. Died June 26. Survived by daughter, son, mother.

GANTNER—Donald, Dept. 603. Died July 13. Survived by wife, Jeanne; three daughters, three grandchildren, two brothers, one sister.

HAMILTON — Richard C., Dept. 6. Died July 14. Survived by wife, Virginia; son, two daughters, mother, brother.

Harper Gets Hole in One In CRA Golf

Entries open today (July 22) for the CRA golf sweepstakes to be held Aug. 8-9 at Circle R, Ken Wulfemeyer, commissioner, reported.

Reservations can be placed by calling ext. 1705, Plant 1. The deadline is Aug. 3.

A hole-in-one stole the "thunder" from flight winners at the July 11-12 sweeps at Balboa, Wulfemeyer said. L. M. Harper (Dept. 3) teed off with a four wood on the 190-yd. par three 12th hole at Balboa and holed the ball for the first ace in his golfing career.

Ken Bayless (Dept. 401) led golfers in the 0-14 handicap group with a gross 72. Runners-up (with 75s) were C. "Curly" Maxfield (Dept. 120) and Ralph Way (Dept. 6). A tie developed for low net honors between Frank Kelley (Dept. 6) and Paul Herrera (Dept. 31). Both handicapped a 68 total.

In the 15-20 handicap group Scotty Rutherford (Dept. 133) and Grant Lindsey (Dept. 95) placed first and second in the low gross event. Low net winners were Lee Arsenault (Dept. 146) and Ralph Grossher (Dept. 15).

Low gross honors in the 21 and over bracket went to Lee Snyder (Dept. 600) and Mike Valin (Dept. 138). Low net winners were Adrian DesRosiers (Dept. 231) and Glenn Baker (Dept. 138).

Five Bowmen Win In Trophy Shoot

Winners of a trophy shoot sponsored July 12 by the CRA Archery Club were announced last week.

Al Phipps led bowmen in the "A" group and Jim Bence led the "B" bracket as archers worked out on 28 field targets, 14 hunter and 14 animal targets.

Bob English placed second in Group "A" and Warren Osborn was runner-up in Group "B." Danny Osborn took honors in the Little Beaver category.

40 Jeep Clubbers Attend Park Picnic

Forty members of the CRA Jeep Club and the San Diego Ridgerunners attended the annual picnic at Pecan Park July 12.

Art Thomas (Dept. 25) handled arrangements for the barbecue dinner and Thomas Binder (Dept. 406) headed the entertainment committee.

Padre Home Game Tickets Available

Discount tickets to next week's home game (July 29) of the Padre ball club will be available at Convair SD employee services two days before the Wednesday night game.



TOAST — New Convair Golf Club champion Al Reiter (on right) puts first place award, a cocktail set, to use at awards banquet July 9. Doing honors is runner-up in championship flight Ralph Long.

Three Teams to Meet In Softball Matches

A three-way tilt will match Convair Pomona, Antelope Valley and San Diego softball teams against each other Saturday (Aug. 1).

Games will be played in Jane Reynolds Park at Lancaster, with first game scheduled at 6 p.m. between Pomona and Antelope Valley nines. Winner will play San Diego.

V. Korski New Commissioner Of CRA Flyers

Appointment of Victor E. Korski (Dept. 6) as commissioner of the CRA Solo Flyers was announced last week by J. K. Field, SD chief of employee services.

Korski, a flying enthusiast even as a youth, has been with Convair since December of 1939, except for tours of duty with the Army and Air Force Reserve 1947-49.



V. E. Korski

He flew primary gliders as early as high school days and was secretary-treasurer of the Associated Glider Clubs of Southern California 1940-41. He is a past member of the Consair Flying Club and is presently affiliated with the San Diego Flying Club.

In 1940-42 he also completed the CPT (Civilian Pilot Training) course to attain his commercial pilot's license.

Programs sponsored by the CRA Solo Flyers include a ground school course which prepares students for their private pilot's license exams. Plans are presently under way for an additional course to enable pilots to get their commercial rating. In addition, a Link Trainer for the use of club members and Convair employees is expected to be in operation shortly.

He is also active in scouting activities, presently serving as assistant advisor for the Convair SD Management Club's Air Explorer Squadron 340.

Korski lives in Clairemont with his wife, Faith, and son, "Korky," 16.

Three Rockhounds Win in Gem Display

Three Convair SD Rockhounds were among those awarded ribbons at the mineral and gem exhibit at the San Diego County Fair this month, Dan Whorton, commissioner, reported.

"Pinky" Kraus (wife of Chuck Kraus, Dept. 6) won three first-place ribbons in the cabochon class. Fred Dunivan (Dept. 31) placed second and third in the same category.

Frank Gallik (Dept. 31) placed second in a special class with a pair of lamps made of agate and obsidian.

SD Bowlers Get Choice Of 18 Winter Leagues

Eighteen leagues (including swing shift) have been tentatively set up for bowlers at Convair SD to choose from for fall and winter keg activity.

Entries for the leagues are now being taken and Jim Hayman, commissioner, urged bowlers to get their reservations in as soon as possible.

Leagues planned and persons to contact are:

BOWLERO

Monday: Mixed league 6:30 p.m., June Davis, ext. 2651, Plant 1.

Tuesday: Mixed league 6:30 p.m., Bob Heath, ext. 1203, Plant 1.

Tuesday: Men's engineering handicap 6:30 p.m., Bob Johnston, ext. 2381, Plant 1.

Friday: Mixed league 9 p.m., Jim Hayman, ext. 1155, Plant 1.

CLAIREMONT

Monday: Mixed league 6:30 p.m., Dick Hanson, ext. 1809, Plant 1.

Friday: Mixed league 6:30 p.m., Ralph Campbell, ext. 1731, Plant 1.

PACIFIC RECREATION

Wednesday: Mixed league 6:30 p.m., Jim Hayman, ext. 1155, Plant 1.

Thursday: Mixed league 6:30 p.m., Hayman.

VICTORY LANES

Thursday: Engineering scratch league 6:30 p.m., Jim Mack, ext. 1104, Plant 1.

TOWER BOWL

Friday: Men's 800 and 850 scratch leagues 6:30 p.m., Mike Brooks, ext. 583, Plant 2.

Friday: Mixed handicap league 6:30 p.m., Brooks.

UNIVERSITY LANES

Monday: Mixed handicap league 6:30 p.m., Jim Hayman, ext. 1155, Plant 1.

Monday: Men's 825 scratch league 6:30 p.m., Hayman.

Wednesday: Mixed handicap league 6:30 p.m., Hayman.

PACIFIC RECREATION (swing shift)

Tuesday: Mixed league 1:30 a.m., Mike Brooks, ext. 583, Plant 2.

Wednesday: Mixed league 11 a.m., Brooks.

Friday: Mixed league 1:30 a.m., Brooks.

CRA Sponsors Free Course In Conversational Spanish

Free lessons in conversational Spanish will be sponsored by the CRA at Convair SD if a sufficient number enroll for the course.

Main purpose of the class would be to give students a "working" knowledge of the language. Rules of grammar, syntax and other formal characteristics will not be emphasized, although they will be discussed as necessary.

Jim Hardison (Dept. 15-1), a fluent Spanish linguist, will instruct the course. His background includes three years of residence in Mexico City during which he attended the college and university there.

He said that depending on the demand there will possibly be separate courses for the beginners and another for those who have some familiarity with the language. Spanish will be used during classroom instruction as much as possible.

Customs, etiquette and other tips for the visitor to Mexico will be discussed as well as the political and economical structure of the Latin American countries.

Other aids that would be employed in the course would most likely include Mexican films, radio and trips to the border. The brand of Spanish taught will coincide as much as possible with that used in Mexico City and over the radio.

Persons interested in a course of this type should contact employee services, ext. 1245, Plant 1.

Free Skiing For Novices Now Offered

A special incentive is being offered prospective water skiers at Convair SD.

Free lessons are now being offered by the club for novice enthusiasts on their first weekend of activity, T. E. Mathews, commissioner, said.

Mathews said the club will do everything possible to get candidates up on the skis on their first weekend out so that they will be able to enjoy the popular water sport.

Regular tow fees are 25¢ for a mile ride or 50¢ for a two-mile ride. Two skiers can ride for the price of one. The club meets weekends on Tierra del Fuego on Mission Bay.

Club members elected Gene Sevigny (Dept. 6) as commodore of the club at a supper meeting July 7 at Gillespie Field. Other new officers are Gene Augustin (Dept. 6), treasurer, and Carrie Arman (Dept. 34), secretary.

The new officers, under the chairmanship of Roy Kirkeby, are compiling a program of events for the entire summer. Skiing inquiries should be directed to any of the following: Sevigny, ext. 1032, Plant 1 or BR-3-0828; Augustin, ext. 2301, Plant 1, or JU-3-3700; or Carrie Arman, ext. 2338, Plant 1 or AC-4-1992.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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BADMINTON—Open play for families Tuesday evenings, 7:30 p.m., in Federal Bldg., Balboa Park.

BOWLING — Entries being taken for winter leagues. Call Jim Hayman, ext. 1155, Plant 1, or Mike Brooks, ext. 583, Plant 2.

BRIDGE — Next session Aug. 4, 7:30 p.m., Barcelona Hotel, 4th and Juniper Sts.

CAMERA CLUB — Quarterly photo contest July 27, 7:30 p.m., Photo Arts Bldg., Balboa Park.

GOLF—Entries open today (July 22) for Aug. 8-9 sweepstakes at Circle R. Call ext. 1705, Plant 1, to register. Deadline is Aug. 3.

GUN CLUB—Trap and skeet shoot July 26, 9 a.m., Gillespie Field range.

JEEP CLUB — Next meeting Aug. 19, Civil Defense Bldg., Gillespie Field.

JUDO—Workouts every Thursday, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admission: adults 25¢; children, 15¢.

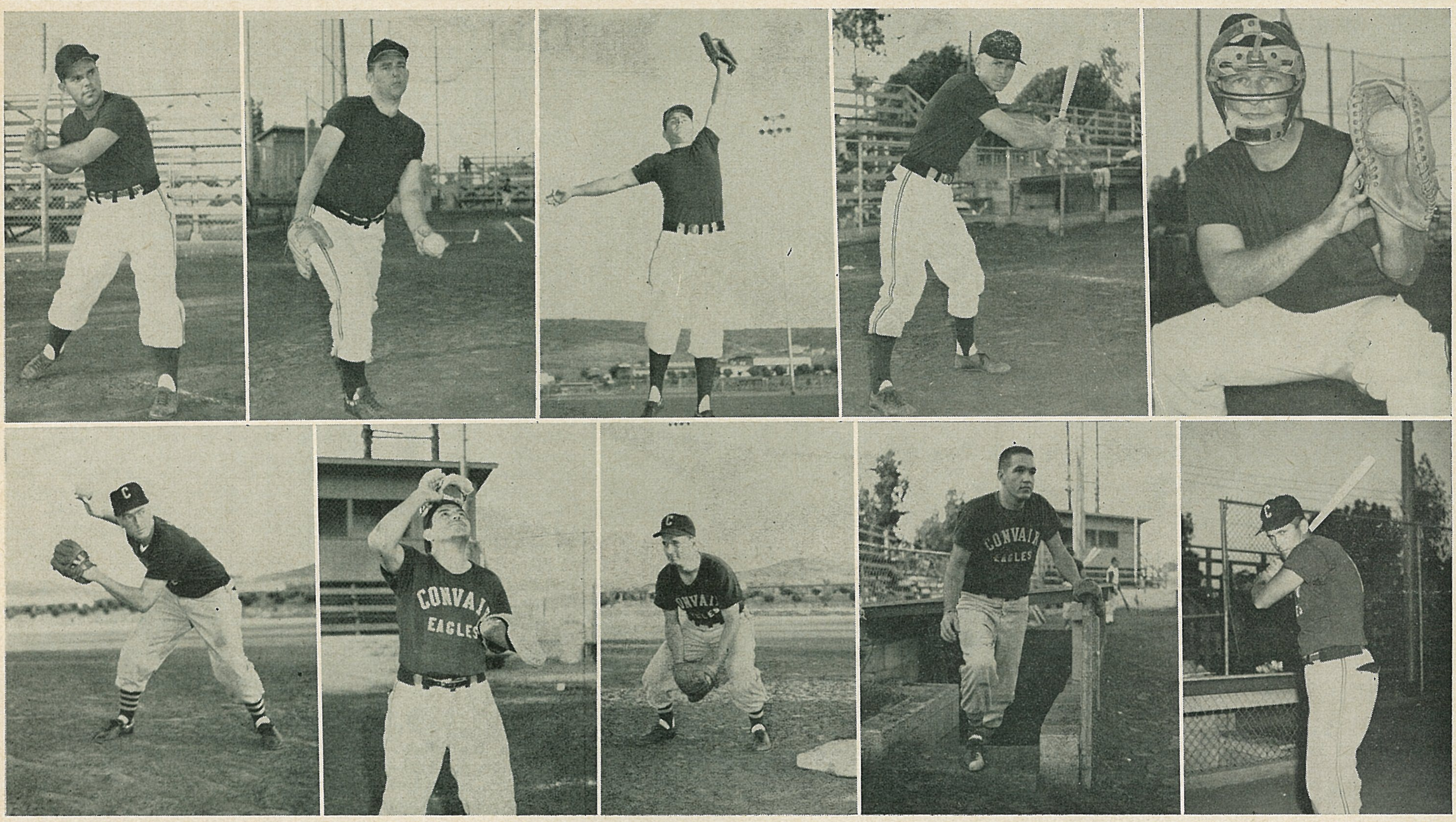
RADIO CLUB — Meeting at 8 p.m. tomorrow (July 23) at Harbor Drive headquarters.

RIDING CLUB—Annual Point Horse Show Sunday (July 26) at Kenmore Stables, Mission Valley, 9 a.m.

SQUARE DANCING—Convair SD Hoedowners "Summer Hop" Saturday (July 25) at University Heights Community Center, 4044 Idaho St.

SWIMMING — Free family swim night Aug. 1, Mission Beach Plunge, 7-9:30 p.m. Tickets at employee services, both plants.

WATER SKIING — Free instruction for beginners on first weekend. Skiing each Saturday and Sunday, Tierra del Fuego, Mission Bay.



LEAGUE LEADERS—Convair's two softball entries in the San Diego City League are currently waging nip and tuck fight for first place. Softballers shown here represent more than 35 years playing experience for the Convair SD "varsity." In bottom row Convair Eagles players (from left) are: Curt James, shortstop; Tommy Martinez, catcher and manager; Bob Stratton, third baseman; Bob Miller, pitcher; Al Hooper, centerfielder. Above A team players are: Bill Doten, third baseman; Art Bunge, pitcher; John Hartsell, centerfielder; Dick Fenton, left fielder; Dean Froggatte, catcher and manager.—Photos by Ron Ainsworth.

Convair 'A' Team Now in First; Eagles Lose 5-0, Slip to Second

Convair's Eagles were tumbled out of first place last week in the San Diego AAA Softball League. But as fast as they slipped into second the Convair "A" team moved into first.

The two local entries traded positions as a result of a 5-0 defeat—the second of the year—for the Eagles. Sutton's Plasterers got their bats unstuck and belted Eagles' pitcher Bob Miller for his second loss of the year.

The Convair "A" team meanwhile pushed their victory skein to 13 straight, with wins over Quaff Barrel (2-1), Anderson's Furniture (3-1) and Southeast Merchants (3-2). Pitcher Art Bunge picked up his 13th win in the latter game. He has not been beaten in league competition this year.

In the 3-2 victory over Southeast Merchants the "A" team followed the script again and came-from-behind to tie the ball game 2-2 in the fourth inning. In the seventh they went ahead to stay as they combined a walk, a hit, and a hit batsman to load the sacks. Gene Wilkey scored from third on John Hartsell's infield grounder.

In addition to the timely hitting of Hartsell, the "A" team offense has been sparked by the bats of Bill Doten and Dick Fenton. The Eagles have for the most part been riding along on the bats of manager Tommy Martinez, pitcher Bob Miller and centerfielder Al Hooper.

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Shop league softball at Convair SD concluded the first round of activity this month with undefeated Flite Test perched on top of the National League with seven victories.

In the American League, Dept. 31 and Planning tied for the first half lead. In a play-off game Dept. 31 edged Planning 7-3 to take the first round title.

HONORS DIVIDED IN PISTOL SHOOT

Pistol class winners in a shoot staged by the CRA club July 12 were Joe Williamson (Dept. 401), Carl Monds (Dept. 115) and Dorcas Utter (wife of Arley Utter, Dept. 129).

Williamson edged B. L. Broadway (Dept. 603) and Jim Halfacre (Dept. 180) by three points, scoring 291 points in the .22 police course event. Broadway and Halfacre tied with identical scores of 288.

W. G. Walker (Dept. 6) was runner-up to Monds in the expert class. R. E. LeLand (Dept. 6) snared second in the sharpshooter class, only one point in back of Mrs. Utter's winning tally of 258 points.

Over the short national match course Broadway scored 280 points to edge Williamson and Halfacre who tied for second with 279.

The next club shoot will be held July 26 starting at 9 a.m. at the San Diego Police Pistol Range.

ROGERS TO JUDGE SD LENS CONTEST

The second quarterly contest of the CRA Camera Club at Convair SD will be judged by Rufus Rogers, a prominent amateur photographer.

The contest will be held July 27 starting at 7:30 p.m. in the Photo Arts Bldg., Balboa Park. Entries will be limited to portraits (formal or informal) and posed shots.

Ron Ainsworth, club spokesman, said that contest rules have been amended to provide for a greater number of awards in the black and white division.

At the club's Aug. 10 meeting members will see two movies. "The Magic Island," a movie about Hawaii, filmed by Phillip Rapp of the Convair SD illustrations group, and a Kodak movie, "This is America in Pictures," will be shown.

Watermelon Menu For "Summer Hop"

Convair SD Hoedowners will have a "watermelon bust" at their monthly party night this Saturday (July 25) at the University Heights Community Center.

Called "Summer Hop," requirements for the dance are vacation clothes and dancers in a vacation mood. Van Van der Walker and Marvin Taylor will call for the dance, which "squares up" at 8 p.m.

P. E. Liggett, commissioner, reported that 56 Hoedowners attended a trip to Knott's Berry Farm recently.

CRA Sports & Recreation Convairiety

Large Crowds Expected Sunday At SD Riding Club Horse Show

The second major event of the Convair SD Riding Club year is only four days off.

This Sunday (July 26) hundreds of spectators and a host of riders are expected at the Kenmore Stables in Mission Valley when the CRA group hosts its second major Horse Show of the year.

Both admission and parking for the show, which starts at 9 a.m., will be free. Entries for the show have been received from all over the Southern California area and trophies and ribbons will be awarded in each of the 20 classes.

Accredited by the San Diego County Horse Trainers' Association, the show will present English and Western classes intermixed with Hunters and Jumpers events. Thirteen classes are for juniors, four are open, and three are set aside for adult amateurs.

And if that's not enough to keep the spectators entertained, there will be a Texas Barrel Race to spark things up during the mid-day intermission.

C. L. Pogorel, commissioner, announced that the following are handling arrangements for the show: V. G. Paul, show master; F. C. Darnell, ring master; R. L. Robinson, announcer; and M. L. Sweeney, publicity.

Entry fees have been set at $2 for the children's classes; $3 for all others.

DON LEJA THROWS NO-HIT BALLGAME

Pitcher Don Leja (Dept. 6) twirled a no-hit ballgame recently in the San Diego swing-shift league to lead his Dept. 280 teammates to an 11-1 victory over Rohr. The Rohr team combined two walks and an error to send a run across the plate.

Five Modelers Plan to Enter Championships

Five members of the CRA Aeromodelers at Convair SD will represent the club at the National Model Airplane Championships July 27-Aug. 2 at Los Alamitos Naval Air Station.

They are Nat Antonioli, Denny Davis, Charles Primbs, Richard Sladek and Gary Witt. All five will take a week's vacation to enter the championships, considered the "World Series" of aeromodeling.

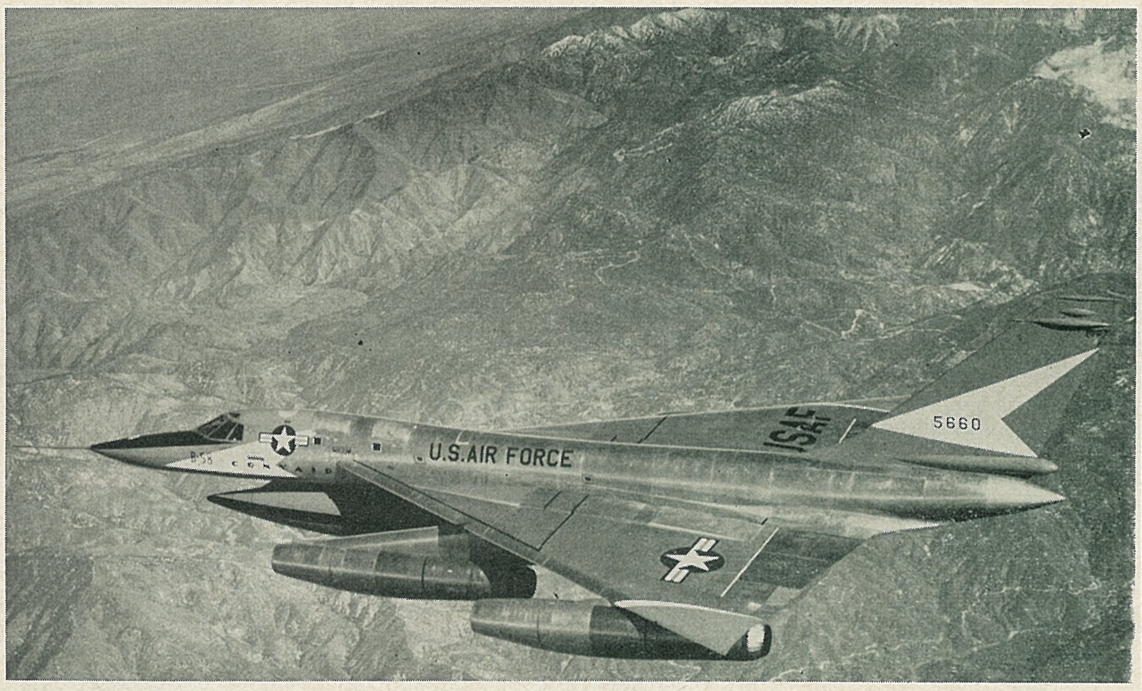
Among the planes the modelers will enter in the competition are a 650 square inch (wing) model; a scale model of the Curtiss Robin which has won a first, second, third and fourth in major scale contests in Southern California, and a high-flying model for the ½A free flight gas event.

Davis, who is a nationally known model builder, will enter two newly designed and still-to-be-tested planes. The models are of the new high thrust line variety for free flight gas.

Additional information regarding the contest can be obtained by contacting either the CRA office, ext. 1245, Plant 1, or Gary Witt, ext. 2405, Plant 1.



READY TO GO—Convair SD Aeromodelers display some of planes they will enter in National Model Airplane Championships to be held at Los Alamitos Naval Air Station July 27-Aug. 2. Members who will carry CRA colors to national contest are (from left): Nat Antonioli, Denny Davis, Charles Primbs, Richard Sladek and Gary Witt (crouching).



OVER ROCKIES—B-58 moves serenely over Rocky Mountains in this beautiful air photo. Even if crewmen had to bail out during war mission over such rough terrain as this, their survival kits would meet virtually every need.

Full Parking Lots Impress Soviet Party

Andrei N. Tupolev, leading Soviet jet airplane designer, spent the July 4 weekend in San Diego this month and with his party toured San Diego Division's Plants 1 and 2.

The visit was arranged by Thomas Lanphier Jr., Convair vice president. It was part of a tour of U.S. aircraft companies. The Convair trip was followed by visits to Lockheed and Douglas.

Lanphier indicated that the doors were opened to Tupolev partly as a means of impressing the visitors with U.S. military might and partly in expectation that American visitors to Russia would receive similar treatment in future.

The visitors showed considerable interest in both the 880 transport and the F-106 interceptor but made no particularly significant comments.

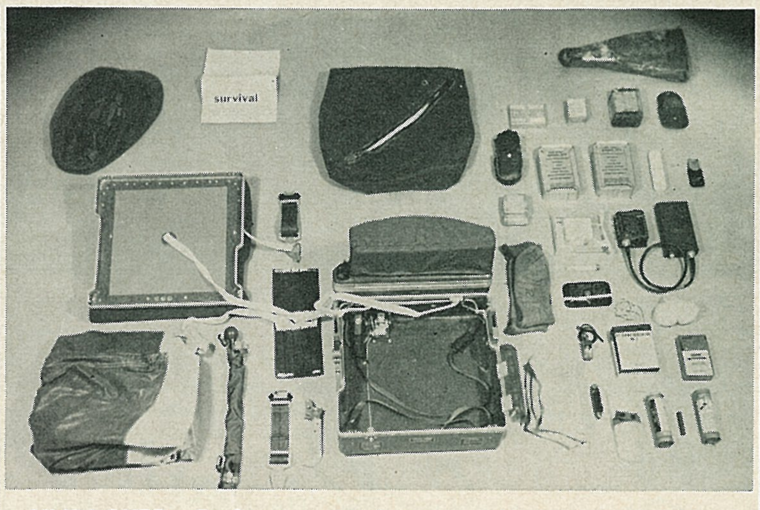
"They seemed impressed by the obvious well-being of our employees," Lanphier said. "Particularly they noted the hundreds of automobiles in our parking lots . . ."

The Russians stayed at La Jolla's Del Charro and were entertained at Kona Kai and in the Lanphier home. One Convair observer, who accompanied them as guide to the Southern California Exposition at Del Mar, was impressed by the Russians' interest in the flower displays.

"They must have taken 1,000 snapshots," he said.

Other observations: the visitors put away big quantities of fruit and fruit juices at mealtimes (evidently rare in Russia); and shunned vodka for Scotch and bourbon.

Only one request stumped the Russians' hosts. A size 44 swim suit — the largest available — didn't even come close to fitting Tupolev!



UNPACKED—Each one a vital item to downed airman, here is how survival kit looks when unpacked.

'Two Bushels Crammed In One' in Survival Kit

Air Force B-58 crewmen forced to bail out on a strategic mission will find they've got just about everything they need when they reach the ground.

This includes a life raft, a rifle and cartridges, matches, a compass, rations, a signal mirror—and two-way radio.

"And that's only the start," says Max Martin, furnishings group design engineer.

"Depending upon the mission—and the territory to be covered—the Air Force would add a number of other items in case they might be needed."

What's more, all the vital gear fits like a two-layer jigsaw puzzle inside a rugged plastic box only seven inches deep, 16 inches wide and 22 inches long.

"In fact, it's a stock joke in furnishings that two bushels of stuff go into a one-bushel container," said Martin.

In service, when a crewman bails out, he automatically takes the survival kit with him. If over water, the crewman would trigger a device which automatically opens the kit, drops the life raft and inflates it before he hits the water.

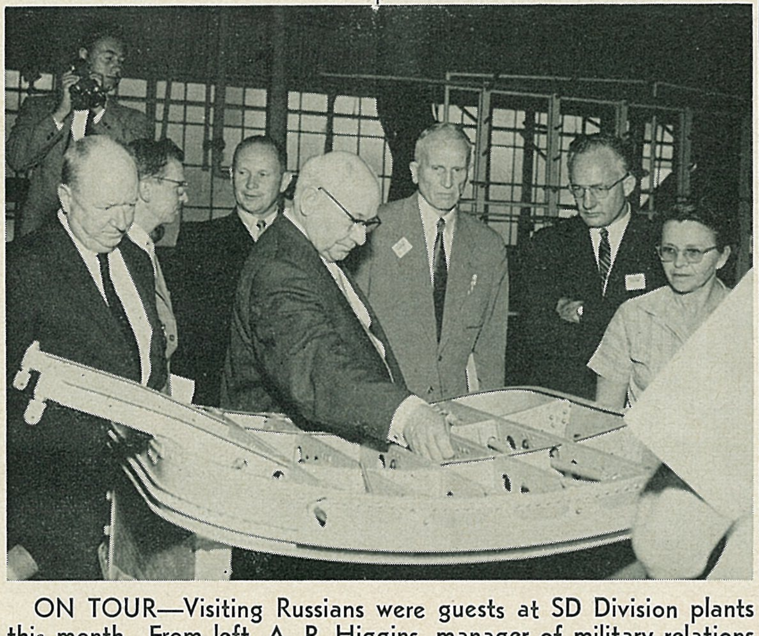
Once aboard the raft, he would find in the kit the items listed above, and others he might need: a net to catch fish, heat tablets, first aid kit, a canteen with water—and a razor with 10 blades!

There'd also be a de-salting kit to use when the water ran out, a fishing kit—and a manual on what to do and how to do it to survive until rescued.

For missions over cold or arctic regions, the kit would contain ski goggles, wool ski socks and a sleeping bag which would protect the crewman to 30 Fahrenheit degrees below zero.

"The Air Force in planning the survival kits has taken into account most everything that a man might reasonably expect to carry aboard a fighting aircraft," said Martin.

"Unlike some nations, we consider our crews definitely NOT expendable, and we do everything possible to assure their safe return—even if the aircraft is lost."



ON TOUR—Visiting Russians were guests at SD Division plants this month. From left, A. P. Higgins, manager of military relations at SD; Evgenty Kutovoy, interpreter; Sergei Yeger; Andrei Tupolev; Alexander Archangelski; Col. Charles Taylor; and Anna Vinson, SD Dept. 133. In foreground is 880 forward cargo door.

New Table and Bench Units Serve Lunchers

Convair Astronautics employees at the main plant were enjoying new lunch-time conveniences this week in the form of new table and bench units.

They are being placed outside buildings in areas where Astro mobile lunch wagons are located. Thirty units were to have gone into service last week. Thirty additional units will be in service soon.

52-in. Rattler Bagged With Single Arrow

Dick Golem, a Dept. 452 apprentice at Convair Astronautics, came home with an unexpected bag July 10 when he went after rabbits with a bow and arrow near his Palomar Mountain home.

Stalking, Golem came within two feet of a 52-inch rattler. He dispatched it with an arrow and counted 12 rattles and a button.

Lab Offers to Perform Precision Optical Work For Other Divisions

A new service is being offered by a newly-expanded group within Convair San Diego electronics sub-department of engineering.

The optical and infrared facilities of electronics are now equipped to turn out precision optical work for other departments at Convair SD, other Convair divisions, or outside companies.

Romuald Anthony, design specialist in charge of the group, explained, "The value of optical instruments for special tooling purposes and the use of infrared techniques in research and experimentation is becoming of increased importance in industry."

In the group's optical shop, set up on the first floor of Bldg. 51 at Plant 1, lenses and mirrors are designed and fabricated to a high degree of precision. In fact, Anthony said, surfaces can be made accurate to one-twentieth of the wave length of light over a diameter of 12 inches. Prism angles can be fabricated to an accuracy of a one-second arc which is equal to the shift of vision in the blink of an eye looking at a point 20 miles away!

The shop is equipped with the only precision infrared optical bench in the country for checking out errors in infrared or visible optical systems.

"Infrared is that portion of the spectrum which falls between the visible and microwave area and is used to bridge the gap between vision and radar. Infrared radiation can be transmitted through materials impervious to visible light. Like radio waves it can travel in a vacuum as well as through air," said Anthony.

A dark tunnel, 150-ft. long, is being readied on the second floor of Bldg. 51 for testing an infrared fire control system designed for the Convair-built F-106.

"We hope soon to be using an infrared system as a welding monitor," Anthony continued. "With infrared radiation measuring temperature differences, we can determine characteristics of welds and castings and convert the temperature information to black and white film for permanent record."

Microwave, radar, thermodynamics, and manufacturing development are among groups at Convair SD and Astronautics who are availing themselves of services offered by the optical and infrared facilities group.

It is grinding metals to be used as standards in inspection, fabricating new materials for experimental purposes, and planning the application of optical techniques to design of radar antennas and receivers.

One of the group's most recent accomplishments was the design and fabrication of a "schlieren" system, the optical portion of the Convair ballistic test section being used at Ames Laboratory, Moffett Field, Calif., for study of shock waves. The unit can take pictures of shock waves from a ballistic missile traveling at 20,000 feet per second. It is enabling the team of Convair researchers to "see" the effect of the shock on microwaves and to get an actual pictorial record of the wave itself.

The portable unit is said to be one of the first of its kind, and probably the largest, in use for this type of testing.

The optical and infrared group now consists of eight men in addition to Anthony, all experts in their fields. Four men work in the optical shop, two in research, and one each in optical design and infrared systems. "Every one of our men has had a wide background in optical systems work and research, making it possible for us to offer our services in a highly technical field. We feel that the application of new optical and infrared methods will become more and more important and necessary for accurate instrumentation, data recording, and production control," Anthony said.

New Courses Assist Exam Preparations

Two new courses to assist Convair employees interested in preparing for exams given by the California Board of Registration for Civil and Professional Engineers are on tap in San Diego.

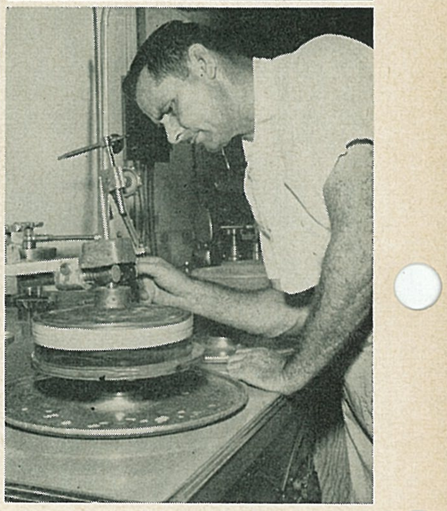
They open Aug. 4 and 6 for a 15-week period under the sponsorship of the University of California Extension service. One will be taught by James B. Hershoff, Convair SD design specialist.

Interested students may apply for information on the "Fundamentals of Engineering" courses at the Extension office or obtain data through Convair educational services offices at SD and Astro.

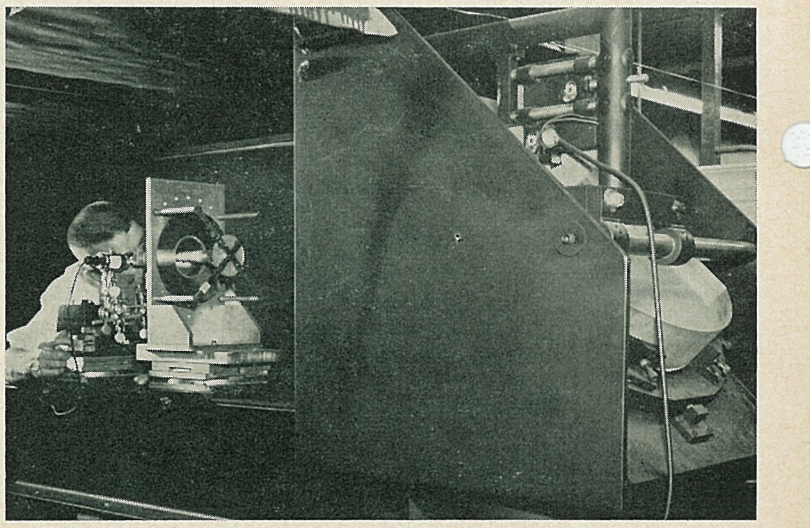
Association Elects Pomona's Overturf

Convair Pomona's Jack C. Overturf (Dept. 6) has been elected president of the Orange Belt Chapter of the Systems and Procedures Association for the 1959-60 club year.

Overturf is a systems analyst in the engineering procedures group.



LENS POLISHER—H. C. Hall polishes large optical lens on one of polishers for precision work in Convair SD optical shop on lower floor of Bldg. 51.



OPTICAL CHECK—F. H. Vogler uses precision infrared optical bench at Convair SD for testing out errors in optical systems. Bench is said to be only one of kind in country.

C-V CONVAIR

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.

Redeye Missile Developed For Ground Troops

The U.S. Army and Marine Corps this week announced plans for joint development of a new surface-to-air, shoulder-fired guided missile system.

The Army Rocket and Guided Missile Agency, U.S. Army Ordnance Missile Command, has awarded a development contract for the system, totaling approximately $6 million, to Convair Division of General Dynamics Corporation. The development work will be done at the facility operated by Convair at Pomona.

The missile system, known as "Redeye," is designed to provide combat troops with the capability to destroy low-flying strafing or bombing aircraft.

The decision to develop the system was based upon a feasibility demonstration conducted by Convair under government contract during the past year. Results indicated the development is technically feasible.

Redeye is a man-transportable missile system designed to destroy low-flying jets or conventional planes. The weapon system is approximately four feet long, three inches in diameter and weighs approximately 20 pounds. It is effective at altitudes and ranges commensurate with defense of Army field positions and Marine Corps amphibious operations against strafing and bombing aircraft.

The missile's launcher resembles the famed "bazooka" launcher of World War II and Korea in appearance only. The launch tube serves as the shipping container for the missile.

The missile itself is a composite structure containing propellant, high explosive warhead and an electronic guidance system. Both the missile and its launcher can easily be carried by one man through underbrush and rugged terrain where no other type of anti-aircraft weapon could be transported.

Word of the contract was first given by Assistant Secretary of the Army Courtney Johnson early last month in Los Angeles, and the exact nature of the work was disclosed later by Lt. Gen. Arthur G. Trudea, chief of Army Research and Development, speaking in La Jolla.

"If the Redeye research program meets all our expectations, we will go into production on a large scale," the general was quoted in press reports as saying.

"I can't say as yet how much money would be involved but it would be a big contract. No weapons can be bought cheaply anymore."



REDEYE—This is new shoulder-fired missile under development at Pomona Division for U. S. Army and U. S. Marine Corps. It was shown publicly for first time early this week at Association of U. S. Army annual gathering in Washington, D.C.

SD Reshuffling To Make Room For Mfg. of 600

Getting ready to swing into production of the Convair 600 jet transport, Convair San Diego is in the midst of a gigantic reshuffling program.

Over 100,000 sq. ft. of space in San Diego's Plant 1 buildings is being cleared especially for 600 operations, said R. D. Marks, chief of SD manufacturing planning and methods. All factory buildings at Plant 1 will be involved in the shifts before this fall, when the 600 goes into production.

Bldgs. 1, 2, and 3 at Plant 2 have also been drawn into the "fruit-basket-upset" game with 150,000 sq. ft. being made available to take care of Astronautics people from Plant 1. Other Plant 2 arrangements have been made for the phasing in of the F-108 wing.

"Strategy of our entire moving program, which has been under way since March, is based on placing like operations of the 600 and 880 as close together as possible," explained Marks. "We will, in this way, be able to make the most economical use of manpower and facilities and to reduce component handling to a minimum."

With Convair SD planning to take over production of many components of the 600, which are being subcontracted for the 880 and because of the new parts peculiar to the 600, more space will be required for the jet transport program.

Largest new area to be diverted to 600 operations will be in Bldg. 4 where 40,000 sq. ft. in the east central section, from Col. 21 to Col. 40, will be occupied by pod and pylon assembly.

Starting last weekend Astronautics people began to move from Bldg. 4 to the newly-completed office building at the Kearny Mesa site. Others will go to San Diego Plant 2 as space becomes available.

By the end of August 25,000 sq. ft. will be cleared for the installation of pod and pylon tooling with the entire space to be available by late this year.

Size of the 600 pod and pylon necessitates the occupancy of the high bay area in the building to allow use of the overhead cranes for handling of the large power plant assemblies.

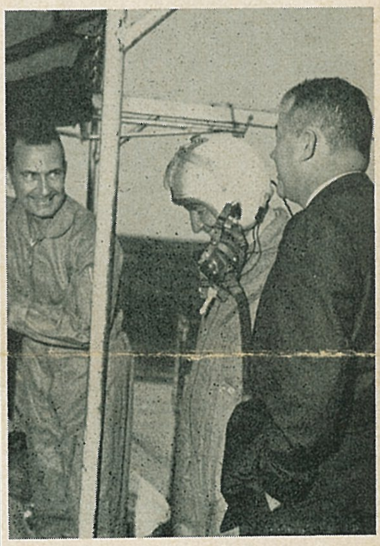
Other moves within Bldg. 4 have seen tool manufacturing jigs and fixtures come from Bldgs. 1, 2, and 3 to be central-

(Continued on Page 2)

Lt. Gen. Bradley Takes Hour Ride In B-58 Hustler

Following in the footsteps of his predecessor, Air Force Lt. Gen. Mark E. Bradley wasted no time in flying Mach 2 in a Convair Fort Worth supersonic B-58.

General Bradley, who recently



GOOD FLIGHT — Division Manager Frank W. Davis, right, accompanies Lt. Gen. Mark E. Bradley, center, and B. A. Erickson to B-58 supersonic bomber flight. Erickson, manager of flight, was pilot.

succeeded Lt. Gen. Clarence S. Irvine as Air Force deputy chief of staff-materiel, dropped in at the Convair facility to inspect the plant and get his first ride in a B-58.

Division Manager Frank W. Davis escorted General Bradley to the aircraft where they were met by B. A. Erickson, manager of flight.

Erickson briefed General Bradley on B-58 operations before he settled down in the second station. Convair Fort Worth's Norman Stanberg rode third station, and Erickson piloted. They were in the air one hour and five minutes.

USS Long Beach to Have Unlimited Cruise Range

The nation's first nuclear-powered surface vessel, the guided missile cruiser USS Long Beach, will have "virtually unlimited" cruising radius at high speeds.

The Long Beach, which was launched July 14 at Bethlehem Steel Company's Quincy, Mass., shipyard (**Convairiety**, July 22), will be armed with Talos and Convair Pomona-built Terrier surface-to-air missiles.

Scheduled to be completed in late 1960 and to join the fleet in 1961, the Long Beach will be powered by two pressurized water reactors, supplied by Westinghouse Electric Corporation. The reactors are similar to the ones used in the Navy's nuclear-powered submarines, several of which were built by the Electric Boat Division of General Dynamics Corporation.

Bethlehem's background in nuclear power began back in 1950 when the company provided consulting services in connection with the design of the first nuclear-driven submarine, the USS Nautilus (built by EB).

Capt. Eugene P. Wilkinson, USN, first commanding officer of the Nautilus and a native of Long Beach, Calif., has been designated as the first commanding officer of the new cruiser.

The Long Beach is the first of three nuclear-powered surface vessels being built for the Navy.

New Terrier Ship Named

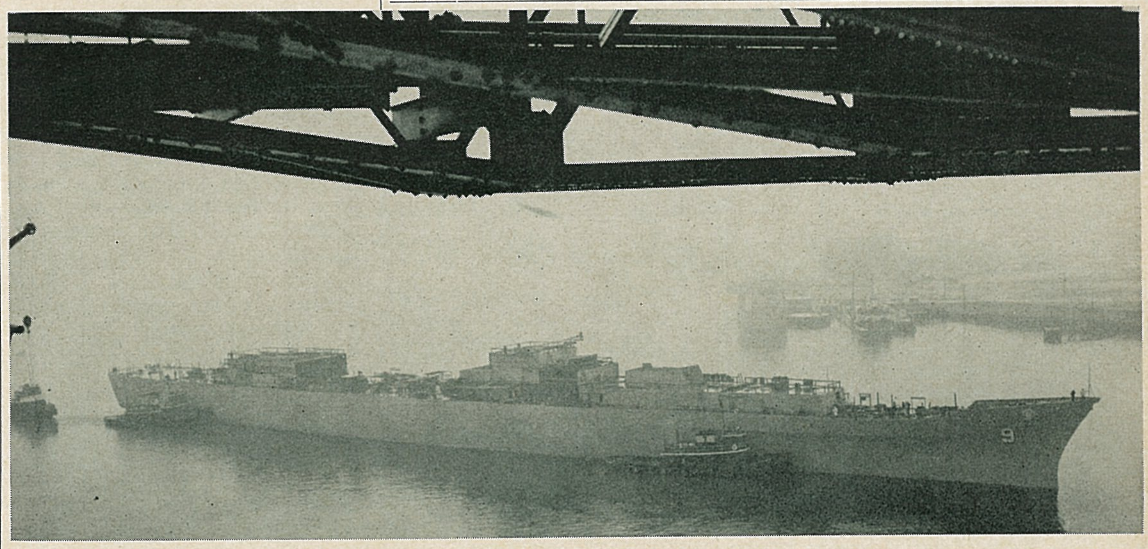
The USS Macdonough, one of three of a new guided missile class of conventionally-powered frigates under construction at Bethlehem Steel Company's shipyard in Quincy, Mass., was christened July 9.

The new ship, designed to serve as a leader of a destroyer group, has an overall length of 512 feet, 6 inches; breadth of 54 feet, 4 inches, and a depth of 30 feet, 3 inches. Equipped with the latest in missile firepower (including Terrier) to provide anti-aircraft and anti-submarine protection to larger ships, the Macdonough will be one of the most powerful striking weapons of the destroyer fleet. Her keel was laid April 15, 1958.

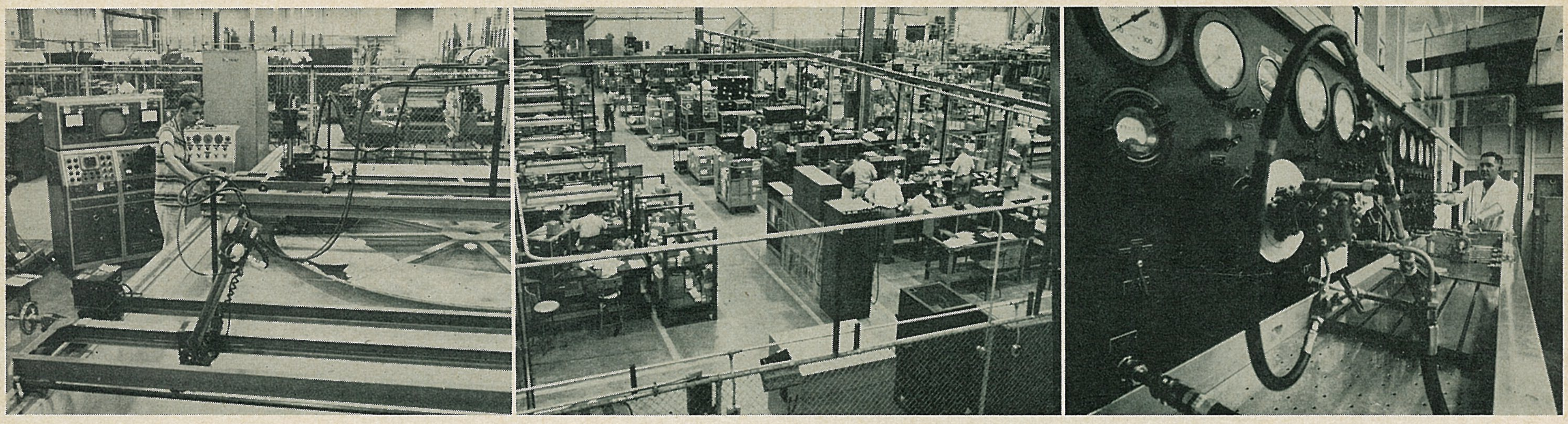
Boy Run Over Twice But Escapes Unhurt

Daniel Wayne Mills, 3, son of R. R. Mills of FW Dept. 57, was run over by a car twice July 21 and escaped with only bruises.

The boy was playing in a neighbor's driveway when the auto pulled in and ran over him. The driver, evidently in panic, threw the car in reverse and ran over him a second time!



NAVY'S FIRST—First nuclear-powered surface ship, cruiser Long Beach, is towed up Fore River from shipbuilding basin at Quincy, Mass., following christening last month. Terrier-armed, she is scheduled for completion next year.



RECEIVING—Top center is overall view of receiving inspection at Astronautics Division in which each part received is carefully checked out. At right H. A. May inspects sustainer activator in pneumatic and hydraulic test section. At left Paul Nixon operates ultrasonic test tank which shows up flaws with use of sound waves.

Redesigned Landing Gear Brace Effects Large Saving for 600

A saving of $117,550 on the first 25 Convair 600 jet transports to be built for American Airlines has been announced by W. R. Bruce, Convair SD manager of material.

Redesign of the structural brace for the main landing gear system for Convair's newest transport, to go into production this fall, has resulted in reduction in cost of the components.

As long ago as November of last year, Convair SD engineers were studying the Convair 600 side brace for the main landing gear system to effect possible saving in both weight and cost. They came up with the new design calling for a solid aluminum forging to replace the piece-by-piece assembly method used for side braces for the Convair 880 landing gear system.

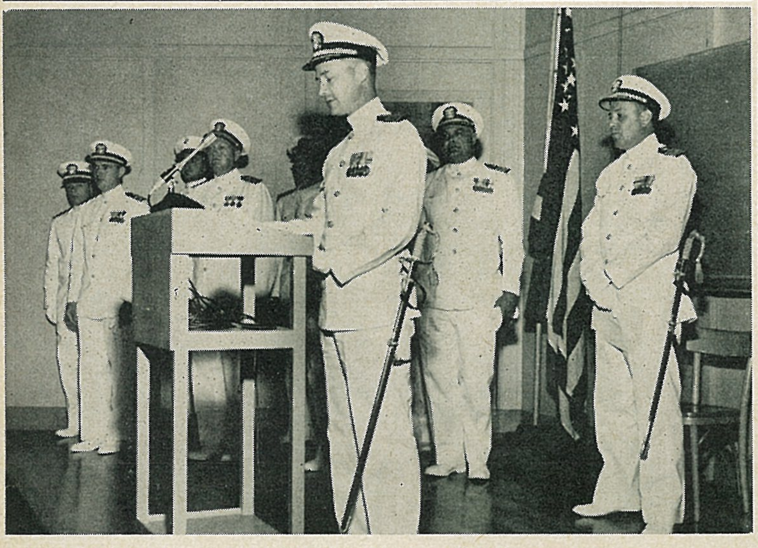
Working closely with Wyman-Gordon Co. of Worcester, Mass., subcontractor, from early stages of design to current production, Convair SD has been able to realize a saving of $4,702 on each plane without changing the weight, Bruce explained.

"This is an outstanding instance in which cooperation and assistance given SD purchasing department by both Convair engineering and the vendor enabled us to accomplish a very substantial saving to the company," he remarked.

Eleven of the huge 12-ft. long, 800-lb. forgings have been received at Rose Canyon warehouse with 19 more of the first order of 50 due in shortly. A pair will be used on each plane. The solid braces are said to be the largest close-die aluminum forgings ever made for a commercial plane.



SOLID BRACE—Joan Molenhouse of Convair SD Dept. 34 checks receiving papers at Rose Canyon for 12-ft. aluminum forgings made for Convair 600 main landing gear side braces.



NEW INSORD—Capt. E. C. Sledge, USN, new Naval Inspector of Ordnance, Pomona, addresses guests at change of command ceremony July 20. At right is Capt. R. B. Heilig, USN, who held position for past two and a half years.

★ Convairiety ★

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FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; H. A. "Pat" Baker Jr., Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Gen. Bradley 100th Mach Two Member

With his first flight in the supersonic B-58 Hustler, Lt. Gen. Mark E. Bradley became the 100th member of the Convair Fort Worth Bomber Wing Mach Two Club.

He was awarded the official pin and certificate after his flight with B. A. Erickson, manager of flight.

General Bradley is Air Force deputy chief of staff—materiel.

Navy Captains Praise Pomona

Praise for Convair Pomona was voiced by both Capt. R. B. Heilig, USN, and Capt. E. C. Sledge, USN, in a change of command ceremony July 20 at the Convair-operated Naval Industrial Reserve Ordnance Plant at Pomona.

Captain Heilig, who was relieved by Captain Sledge as Naval Inspector of Ordnance at Pomona, briefly reviewed his two and a half years at Pomona before reading his orders to duty with the Bureau of Ordnance in Washington, D. C.

"Convair Pomona has done an outstanding job for the Navy," Captain Heilig said.

"In my two and a half years here, I have received excellent cooperation from everyone connected with Convair with whom I have had dealings . . . "

Captain Heilig also complimented his staff for their hard work and cooperation, and commented on the "friendliness of the citizenry in general" in the Pomona area. He also praised the work being done by retired military officers holding executive positions in industry.

"When I was back at the Bureau of Ordnance in Washington in June, I heard excellent reports on Convair Pomona from all sides," Captain Sledge said, after reading his orders to duty in Pomona.

Astro Involved In SD Moves

(Continued from Page 1)

ized on the west side of the building.

In Bldg. 1 operations for leading edges for the 600 and fairings for both the 880 and 600 will be activated in 11,000 sq. ft. in the west central high bay area. Room has been arranged for both 600 and 880 doors in the welding department's area at the northeast corner of Bldg. 1. Bench sub-assembly (Dept. 120) for both 880 and 600 programs and 600 wing tip operations is located on Bldg. 1's northwest mezzanine.

On the northeast side of Bldg. 2, room is now being made available for manufacture of trailing edges and anti-shock bodies for the 600. Now being prepared for occupancy is 20,000 sq. ft. with tooling to move in by the end of August and production to start in mid-November.

Other Bldg. 2 changes are rearrangements, affecting mostly Dept. 144, wing spar assembly, and Dept. 143, wing bulkheads, being made to phase in peculiarities of the 600.

Incoming Atlas Parts Receive Close Scrutiny

First "stop" at Convair Astronautics for the more than 40,000 parts which make up an Atlas missile is receiving inspection. Here, individual parts must "perform" for an unique array of "proofing tools."

Included are "silent" engine run test chambers, dust-free labs for electronic, hydraulic and pneumatic components and a range of individual or console test panels. And there is a special vat employing ultrasonic sound waves.

Astro's exacting inspection routines for the Atlas require an inspector's stamp of approval on the majority of single parts or components before they move along to sub-assembly areas.

This stamp may be affixed in one of two ways.

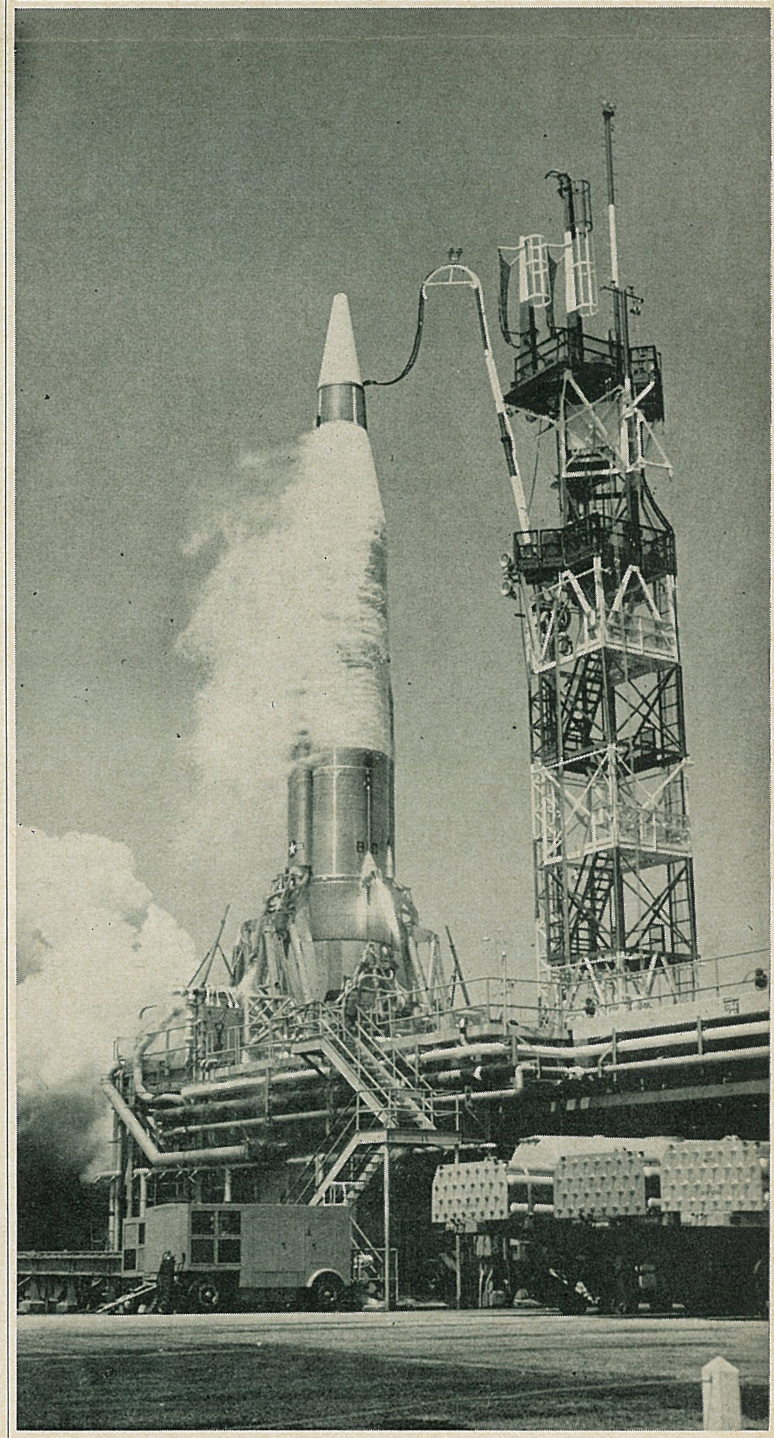
One is by resident Astro inspectors who work at the plants of major suppliers across the nation. Astro currently has over 50 of these. They utilize the supplier's check-out and test equipment, thus eliminating duplication of equipment and operations. Items approved by these men, for the most part, are hurried through receiving inspection with only checks for shipping damage or an occasional quality examination.

On the other hand, thousands of parts arrive each week which have never been viewed by Astro inspectors. These go immediately to one of the receiving inspection functions headed by Sterling Smith, general supervisor.

Many proofing tools are used in checking items that range in size from smaller than a postage stamp to complete Atlas rocket engines.

The latter go through rigid checks in "silent" test chambers. Here equipment in use makes it possible to duplicate operations performed in flight.

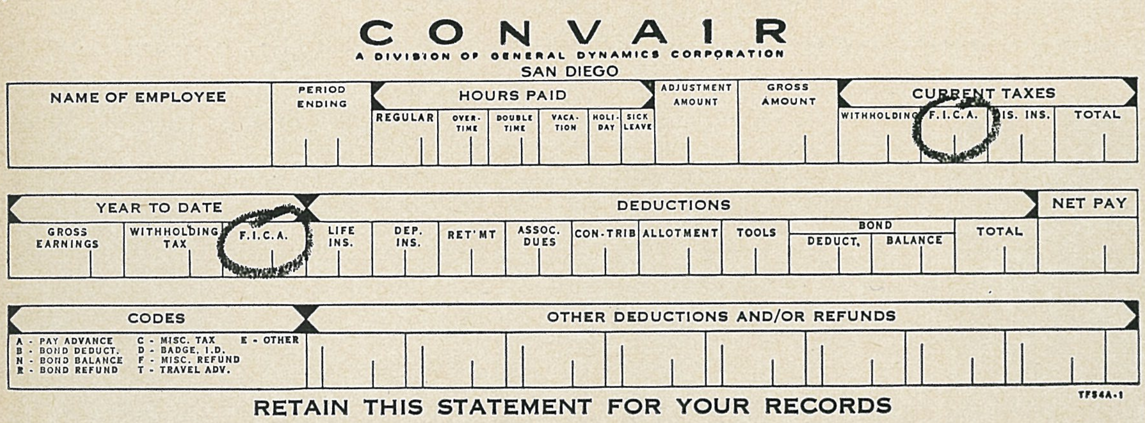
A dust-free area is maintained for checking out electronic components or parts. In the same area special consoles, built as one-only items to Convair specifications, simulate hydraulic and pneumatic operations.



SNORTING CHARGE—This Atlas missile, on launch pad at AFMTC, bellows smoke and flame and shakes off frosty covering during static test run. Missile later completed 5,500-mile flight. Nose cone was recovered from South Atlantic.

It Might Interest You To Know...

Convair employees are "paid" about 17½ per cent more in benefits than appears on their paychecks.


CONVAIR
A DIVISION OF GENERAL DYNAMICS CORPORATION
SAN DIEGO

NAME OF EMPLOYEE | PERIOD ENDING | HOURS PAID: REGULAR, OVER-TIME, DOUBLE TIME, VACA-TION, HOLI-DAY, SICK LEAVE | ADJUSTMENT AMOUNT | GROSS AMOUNT | CURRENT TAXES: WITHHOLDING, F.I.C.A., DIS. INS., TOTAL

YEAR TO DATE: GROSS EARNINGS, WITHHOLDING TAX, F.I.C.A. | DEDUCTIONS: LIFE INS., DEP. INS., RET'MT, ASSOC. DUES, CON-TRIB, ALLOTMENT, TOOLS, BOND DEDUCT., BOND BALANCE, TOTAL | NET PAY

CODES: A - PAY ADVANCE, B - BOND DEDUCT., N - BOND BALANCE, R - BOND REFUND, C - MISC. TAX, D - BADGE, I.D., F - MISC. REFUND, T - TRAVEL ADV., E - OTHER | OTHER DEDUCTIONS AND/OR REFUNDS

TF54A-1

RETAIN THIS STATEMENT FOR YOUR RECORDS

**For Social Security (F.I.C.A.)
YOU will pay up to $120 in 1959. Convair paid $5,930,502 in 1958 and will pay more than that in 1959.**

To finance benefits called for in the Federal Insurance Contribution Act, usually called Social Security, the federal government divides the cost of this protection for individuals about equally between employee and employer.

The employee pays 2½ per cent of the first $4,800 earned in a year (which amounts to $120) by payroll deduction. If weekly gross pay is $100, the deduction is $2.50 a week until $120 has been deducted, at which time the deduction ceases until the following year.

This rate went into effect Jan. 1, 1959. During 1958 the rate was 2¼ per cent of the first $4,200. In 1958 Convair employees contributed about $5,930,502. Convair's contribution to Social Security on behalf of its employees was a like sum. During 1959 the amount deducted for Social Security from employees' paychecks is larger because of the higher rates. During 1959 Convair's contribution also will be larger, for the employer must match dollar for dollar the employee's contribution.

These funds are turned over to the federal government to administer and finance F.I.C.A (See **Convairiety**, Jan. 21, 1959 for a complete explanation of Social Security benefits.)

Pilots Trained in How To Eject From Hustler

Simulated B-58 canopy ejections for Air Force crews will soon become a part of classroom training now that Convair Fort Worth engineers have completed another specially designed mobile training unit.

The new unit, officially tagged a pilot's ejection seat and canopy system, is the first of its kind to be used by the Air Force.

It looks like a section of the B-58 pilot's station, contains a seat that rises slowly about six inches during the make-believe ejection. As part of the familiarization, the canopy slowly moves back during operation, according to C. V. van Doren, design engineer of training aids.

The device's main task is to train pilots in the exact locations of two levers, one for each hand, which must be pulled to activate ejection.

Another of Convair Fort Worth's recently completed training units is the new B-58A fuel system trainer.

This, made up in three different panels, was mechanically and electrically designed with the help of Dept. 6-5's K. G. Bellesine and L. D. Messersmith respectively.

One panel depicts three-dimensionally, what happens inside the Hustler's fuel system, and one makes it possible to trace fuel flow through the aircraft on an electrically lighted board. The other panel helps to explain mid-air refueling.

According to R. K. Howard Jr., development liaison man working in the mobile training unit area, Convair Fort Worth has 21 units being prepared for the Air Force.

The units are being built by employees in Dept. 65, development manufacturing.

F-102 Unit Wins ADC 'A Award'

An F-102-equipped unit was designated one of the outstanding squadrons in the Air Defense Command last month.

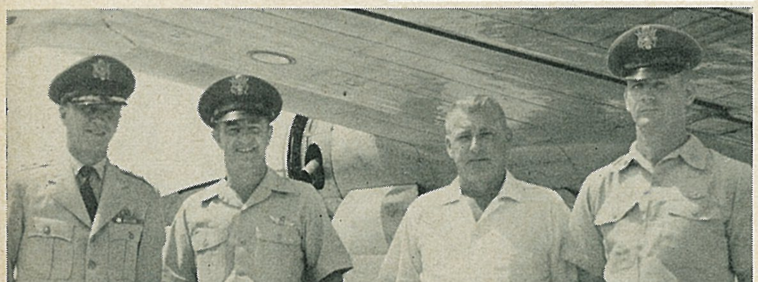
The 482nd Fighter-Interceptor Squadron based at Seymour Johnson AFB, Goldsboro, N.C., received the ADC "A Award" for its record of "exceptional operational effectiveness."

Maj. Gen. E. H. Underhill, commander of the Eastern Air Defense Force, presented the award to Lt. Col. James M. Thomas, squadron commander, in a July 14 ceremony.

The award is given for actual performance under simulated combat conditions and day-to-day performance in training and maintenance. During the 12-month period, for which the award was presented, the 482nd FIS operated out of bases in Florida, Virginia, and North Carolina.

Enrollment Dates Set for College

Convair San Diego people planning to register for the evening program at San Diego College this fall were reminded this week that undergraduates must register by Aug. 14, and graduates by Sept. 11.



OUTSTANDING — Lt. Col. James Thomas (second from left) holds award certificate presented F-102-equipped 482nd FIS for "outstanding" performance. Left to right are Maj. Gen. E. H. Underhill, Eastern Air Defense Force commander; Colonel Thomas; Stan Orton, Convair SD field service representative; and Capt. W. R. McGraw.

'Free' Benefits Cost Convair Each Year

(Where possible, exact figures for 1958 experience are given. Others are approximate.)

For Vacations:
$15 1/2 Million

For Holidays:
$12 Million

For Sick Leave:
$5,639,257.
("Direct" employees alone.)

For Rest Periods:
$9 1/4 Million

For Shift Bonus:
$4 1/2 Million

For Retirement:
$14,394,871.

For Insurance:
$5,206,398.

(This was the cost to Convair in 1958 for employee group insurance, over and beyond contributions of employees.)

Five Big U.S. Air Firms Meet On F-108, B-70

First in a series of conferences with representatives of the five major U. S. aircraft companies involved in the design, development, and manufacture of F-108 Rapier and B-70 Valkyrie weapons systems for the Air Force convened at Convair San Diego last week (July 28-29).

Convair SD F-108 wing project staff hosted the group at the Plant 2 facility. Represented were the Los Angeles and Columbus, Ohio, divisions of North American Aviation, Inc., prime contractor; Chance Vought Co. of Dallas, Texas; Boeing Airplane Co., of Seattle, Wash.; Lockheed Aircraft Co., Marietta, Ga.; and Convair San Diego.

Future conferences are planned on a monthly basis to be held alternately at the home plant of each of the companies involved.

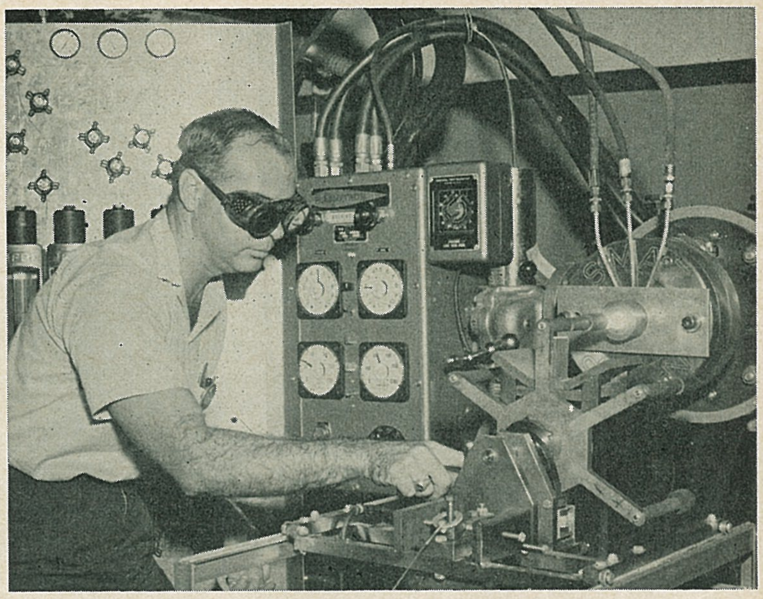
"This is the first time in history that five major aircraft companies have teamed up to develop these highly sophisticated weapon systems," said W. S. Stroud, who heads the F-108 wing program at Convair SD.

The conferences are designed to effect maximum interchange of information during development phase on a timely basis, he explained.

Fogel to Take Part In Panel Discussion

Lawrence J. Fogel, Convair SD research design engineer, will be on the program of the 1959 Western Electronic Show and Convention in San Francisco, Aug. 18-22.

Fogel, head of the reliability design group at Convair SD, will participate in a panel discussion on "The Role of Human Factors in Electronics" at an Aug. 20 session.



HOT SPOT—L. A. Mappus, Convair SD test engineer, uses plasmajet to test materials at temperatures up to 25,000 degrees F. in Plant I materials and processes laboratories at San Diego.

SD Testing Materials Up to Twice Heat of Sun

A revolutionary type of test equipment which can create temperatures up to 25,000 degrees F. is being used in the study of materials at Convair San Diego.

Convair SD is one of the few industrial companies to install a plasmajet — an electrically-controlled phenomenon developed by Giannini Plasmadyne Corp. of Santa Ana, Calif., to obtain temperatures three to five times higher than ever before possible.

Materials such as graphites, plastics for nose cone application, and extremely high melting metals for leading edge materials in high-speed flight are being subjected to temperatures more than twice as hot as that on the sun's surface by L. A. Mappus, test engineer in SD materials and processes lab.

Convair modifications have made possible the duplication of conditions simulating nose cone re-entry into the earth's atmosphere at altitudes of 100 to 200 miles and at temperatures of 15,000 to 25,000 degrees F.

Atmospheric tests within a range of 1,000 to 10,000 degrees F. are being conducted on materials for possible use for leading edges of high-speed aircraft.

"The plasmajet is a unique piece of controllable, calibrated equipment now in use by Convair SD for such studies," said H. C. Sullivan, design specialist in materials technical group. (Sullivan was with Giannini Plasmadyne Corp. during development and testing of the plasmajet before joining Convair.)

Further development within Convair utilizes the plasmajet's capabilities by applying it for the melting and spraying of materials which, because of their high melting points, would be practically impossible to handle by ordinary means.

Within the near future Convair SD materials lab expects to be able to handle such metals as tungsten, for instance, which has a melting point of 6,100 degrees F. Because of its hardness and resistance to heat, tungsten is coming into use for missile parts. Starting out in the form of a powder, the metal would be melted by the plasmajet and sprayed like paint to coat other materials or sprayed on a form to be built up in a particular shape.

"Convair modifications have provided greater flexibility and greater capability in use of this tremendously valuable equipment," said Sullivan. "This type of instrumentation gives Convair capabilities as good or better than any other company in the country for the gathering of knowledge of materials at the high temperatures to which they will be subjected in the space age."

FW Engineer on AF Duty Flies to Japan

Grover Tate, Fort Worth project flight engineer and a captain in the Air Force Reserve, took a trip to Japan while on his two weeks annual training duty.

Tate, assigned to the 75th Air Transport Squadron at Travis AFB, Calif., made the flight in a C-97.



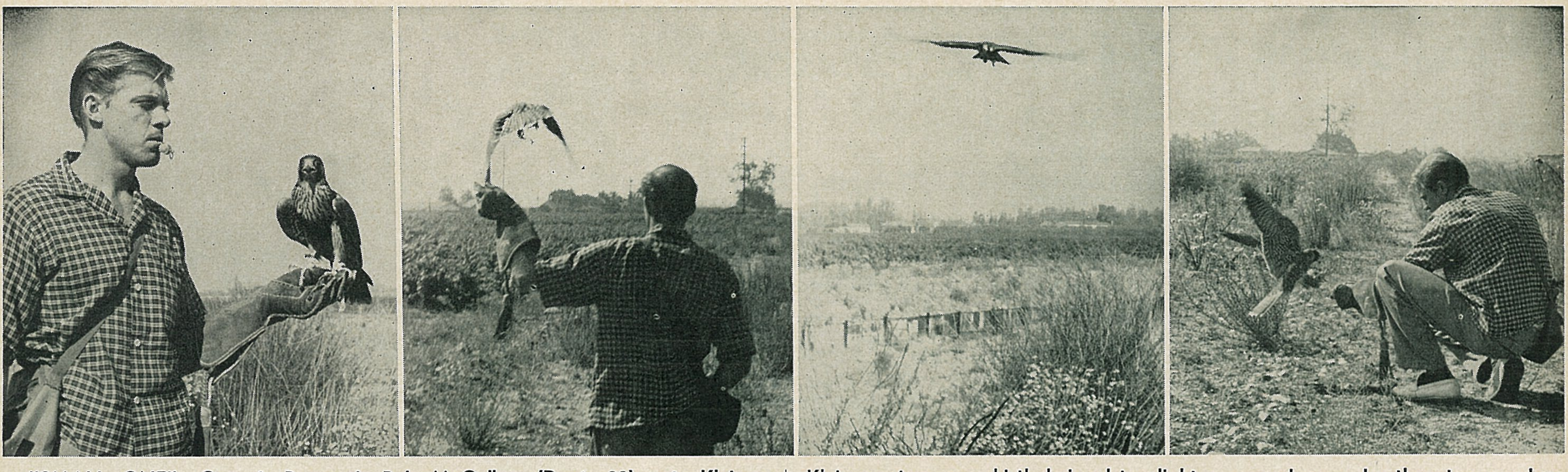
THIRD "BEE"—Latest "Bee" airplane designed and built by two Convair SD men is this V-tailed monoplane. It recently completed initial FAA airworthiness flight tests.

Convair Men Who Designed World's Smallest Plane Bring Out New Four-Place Monoplane

Two Convair men, William F. Chana and Ken S. Coward, both of SD military relations, last month announced design and completion of a new four-place monoplane as a private venture.

Known in the past for building the Wee Bee some ten years ago (world's smallest plane in which the pilot flies from a prone position) and later the Honey Bee, Chana is president of Bee Aviation and Coward is engineering vice president and designer. They do not intend to put Queen Bee into production but hope to interest a manufacturer in it.

Principal features of the V-tailed craft include 360-degree visibility, 47-inch wide cabin and baggage compartment accessible from within the cabin. The plane carries all fuel in fiber glass wing tip tanks as a safety feature. Retractable landing gear includes a nose wheel that is steerable through rudder pedals. Wingspan is 32 feet, maximum cruise range is 600 miles and top speed is 150 mph.



"SMALL ONE"—Convair Pomona's Bob McCallum (Dept. 22) puts Kleinne (which means "tiny" or "small one" in German) through paces. A trained falcon, Kleinne returns on whistled signal to alight on owner's arm. Leather straps on legs, called "jesses," are used with leash to tether bird to perch.

2,000-Year-Old Falconry Still Followed by a Few

When Convair Pomona's Bob McCallum (Dept. 22, second shift) goes hunting, he uses a method which has been in use for over 4,000 years, but which is extremely rare today.

McCallum is one of the few remaining active falconers in this country—or for that matter, in the world.

Falconry, which is the art of training falcons and also the sport of hunting with them, has been traced back to 2,000 B.C., McCallum said. It was used extensively in all parts of the civilized world until the gun was perfected as a hunting weapon, but at present only a few thousand active falconers remain.

"Training a bird of prey is an exacting job, and one that requires a lot of time and patience," McCallum said. "And few people today have enough of either to take part in the sport."

McCallum's present bird — he has had about 30 of them at various times—is a four-month-old peregrine duck hawk, one of the most prized types of falcons. He spent from six to eight hours a day for two weeks in basic training for the bird.

"This was about a third of the usual time required for training a falcon, but Kleinne is an exceptionally intelligent bird," he said.

Kindness and gentleness are among the secrets of training falcons, McCallum said. The falconer must make the bird prefer his life in "captivity" to the wild state. Cleanliness is also important, as the birds are extremely susceptible to diseases.

In hunting, the falconer and the falcon work as a team. The falconer flushes the game, and, on a signal, the bird takes over. After the chase is over, the falconer gives another signal and the bird returns to his perch on the falconer's left arm.

The falconer wears a heavy leather gauntlet as protection from the bird's talons, which are large, strong and sharp. However, contrary to popular opinion, most falcons exhibit no viciousness toward their masters.

"Most falcons actually show affection for their masters," McCallum said. "Kleinne is a very affectionate and playful bird."

Falconry, although illegal in some states, has been legal in California since 1957, McCallum stated. A special license, costing $15, must be obtained for the bird, and the usual hunting licenses are also required. Almost any game which can be legally hunted by other methods, with the exception of ducks and geese, can be hunted with falcons.

"Many people believe that falconry is a cruel sport, but actually it is no more cruel than any other form of hunting, and perhaps less cruel than some," McCallum said. "The game gets away in nine cases out of ten, and a well-trained falcon kills its quarry instantly. The falcon itself receives far better treatment than it would as a wild bird. Also, sooner or later most falcons return to a wild state."

Incidentally, hunters with guns are one of the greatest hazards to trained falcons. In California it is illegal to shoot any bird of prey, and a stiff penalty is imposed on anyone found violating this law, McCallum said.

All falcons must be captured from the wild state, and today in this country most of them are taken from the nest, preferably just before they are ready to leave the nest of their own accord, McCallum said. Nests are usually located in inaccessible spots, such as the faces of high cliffs, which is probably another reason for the decline in popularity of falconry.

Contracts Dept.'s Beauty Level Rises as Mrs. Texas Goes on Job

Miss Universe reigns over the world, Miss America over the United States, but Mrs. Texas has put scepter and crown down and moved her throne room to Convair Fort Worth's contracts department.

June Murrell, wife of the Rev. Arthur V. Murrell, rejoined friends at Convair Fort Worth after a short absence while her husband was minister at the First Christian Church in Henderson, Texas. She worked in engineering back in 1950.

While at Henderson, the Chamber of Commerce sponsored Mrs. Murrell in the Mrs. Texas of 1958-59 contest. Representing East Texas, she was sent to Galveston to compete in the finals and won.

Mrs. Texas contestants are chosen for their cooking and sewing abilities, community and civic activities and for poise and personality.

The Murrells moved back to Fort Worth in February (he is now pastor of the Ridglea Christian Church) and Mrs. Murrell says she plans no more contests.



MRS. TEXAS—Pert June Murrell, last year's Mrs. Texas, recently took job in Convair Fort Worth's contracts department. Here she reads to 28-month-old daughter, Lisa.

'Miss Air Power' Now at Astro

Barring politicians, a Convair Astronautics girl may have set some sort of record for sustained public speaking on a single topic.

Joanne Alford, now of product support department, traveled over 31,000 miles within the United States giving lectures. As "Miss Air Power," a title bestowed upon her by the Air Force Association, she addressed students in thousands of secondary schools in 27 states. She spoke on the advantages of following careers in science and engineering.



CHARMING—Joanne Alford of Astro, former Air Force Association "Miss Air Power," shown while on tour of 27 states. She holds private flying license, incidentally.

"My speaking schedules varied, but it wasn't unusual for me to give eight or nine one-hour talks during the day.

"I found the enthusiasm of the kids worth every minute of it," she recalls.

Joanne's selection for the job was not left to chance. She won the right from a field of 70 candidates representing all parts of the nation.

She was well qualified for the job.

At Purdue University, where she earned a degree in air transportation engineering, she had won honors in numerous flying contests.

In recognition of her charm, which she possesses in abundance, were titles of: Purdue's homecoming queen; dream girl of Pi Kappa Alpha; national sweetheart of Alpha Chi Rho; engineering queen; and a runner-up in a Korean Stars and Stripes newspaper to select "The girl I'd most like to come home to."

In March, 1959, Joanne joined Astronautics and is currently working as a research engineer on personnel requirements with product support.

Is It News?
Call Convairiety

'Silent One'

SD Buyer Recalls Days When He Was Lead Jockey in China

Until his departure eight years ago a Convair SD man was one of the leading jockeys in China.

Gabor Renner, a buyer in subcontracting at Rose Canyon, once rode nine winners in three consecutive days, and on another occasion won three Shanghai Stakes races in a row.



Gabor Renner

He was a member of one of the most exclusive organizations in China—the Jockey Club. "However," Renner pointed out last week, "they are not jockeys in the sense we ordinarily think of jockeys. They do not race for any monetary reward and are best described by the term 'gentlemen riders.'"

Renner raced, for the most part, in Shanghai and Hong Kong. Daily attendance at these tracks averaged 20,000. Roughly two million Hong Kong dollars (six to one U.S. dollar on the exchange) passed through the parimutuels during a 50-day racing period.

Renner's racing career spanned 18 years in China. He was dubbed "Garbo" (the silent one) by the Hong Kong sports writers. During one five-year interval, Renner was particularly successful when he raced Night Express (of which he owned a share).

Renner, too, termed the horse his favorite. He said Night Express won $95,000 in stakes money.

Renner's China exploits came about in a rather remarkable fashion. Born in Budapest, Hungary, he spent two years in Shanghai when he reached age 13. He joined his father, Dr. Alexander Renner, who had established his medical practice there after escaping as a prisoner of the Russians during the first World War.

Renner returned to Europe where he finished his schooling. He received singular training on the continent as a career diplomat. (He still speaks his native Hungarian, also English, German and French, and can make himself understood in Chinese.)

Renner said his love of horses and equitation are easily traced back to his days in Vienna. There he was graduated with honors from the famous Viennese Military Academy, founded in 1746 by the Austrian Empress Maria Theresa, with special emphasis on turning out graduates skilled as career diplomats in addition to tutoring in the highest form of equitation.

Instructors at the Academy were connected with the Spanish School of Equitation in Vienna, home of the Lipizzaners, the world-famous breed of performing horses.

When Renner arrived again in Shanghai in 1933 he was employed by International Telephone and Telegraph in Shanghai and Hong Kong. After a number of years he was given the position of manager of material for the AT&T division. He pursued his avocation as a gentleman rider during these years.

In the United States for the last eight years, Renner has made an extensive study of horses and racing characteristics in this part of the country. He was recently awarded his license as a professional trainer.

With Convair SD for the past three years, his ambition is to someday select and train a thoroughbred according to his standards.

Renner feels that through patience and careful training he can get the best out of an animal. "Observation, though naturally important, isn't enough. One must get the 'feel' of the animal. I would do this by actually riding and working out the horse."

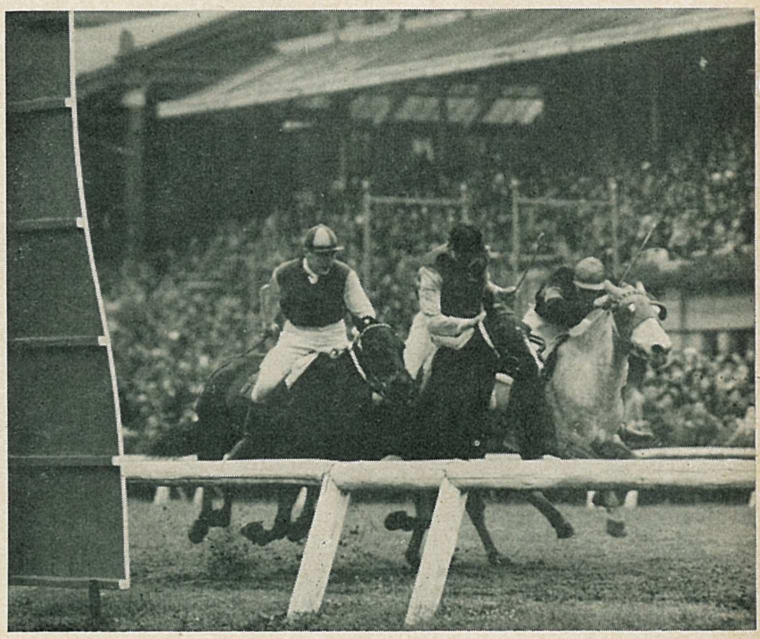


PHOTO FINISH—Gabor Renner, once one of leading jockeys in China, comes down to finish line in practical triple dead heat at Shanghai Race Track. Renner (on far right) finished second. Horses in photo are China ponies, which along with Australian Walers, are used almost exclusively in racing in China. They are smaller than thoroughbreds.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

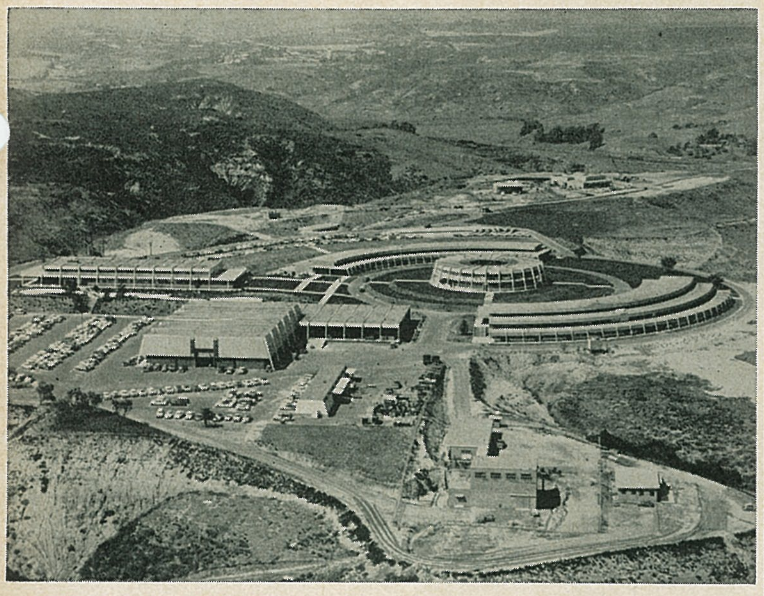
Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.



FROM THE AIR—This is General Atomic Division's John Jay Hopkins Laboratory for Pure and Applied Science, located at San Diego, Calif. Laboratory was dedicated this summer.

Merger of Material Service Based on Stock Exchange Plan

NEW YORK—Principal points of an agreement for the merger of Material Service Corporation of Chicago into General Dynamics Corporation were announced last month by the two parties.

Directors of General Dynamics and Material Service on June 25 unanimously approved the merger by which Material Service will become a division of General Dynamics. Frank Pace Jr., chairman of General Dynamics, and Henry Crown, chairman of Material Service, said that following completion of negotiations the merger proposal would be put before the share owners of both corporations for final approval.

As now contemplated, the agreement basically will call for General Dynamics to acquire the majority of the assets of Material Service in exchange for 2,064,516 shares of a new issue of General Dynamics no-par convertible preference stock on which cumulative dividends at the rate of 5 per cent per annum (approximately $2.90 per share) will begin in 1964.

Under the agreement the preference stock would have a liquidating value of $58.125 a share. Each share would be convertible into .89423 shares of General Dynamics common, or a total of 1,846,152 shares of common. This would give the common an effective conversion price of $65 a share.

The new preference stock will become convertible as follows: 15 per cent in each of the years 1961, 1962 and 1963; 20 per cent in 1964; 20 per cent in 1965, and 15 per cent in 1966. The conversion privilege will expire in 1974.

The agreement calls for holders of the preference stock to elect a maximum of three members to the General Dynamics Board of Directors.

Henry Crown will become one of the three new directors and he will also become chairman of the Material Service Division. The present management policies and personnel of Material Service will be continued and members of the Crown family will remain identified with the business. The profit-sharing plan of Material Service will continue in effect.

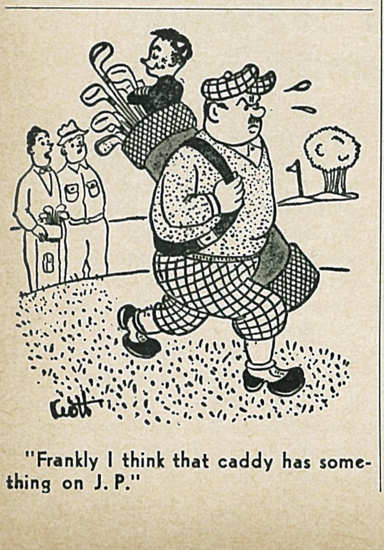
Officials of the two corporations pointed out that changes in some details of the merger agreement as it now stands may be necessary, but added that the philosophy and basic principles of the transaction, as outlined, will not be altered.

Material Service, one of the nation's largest producers of building materials, concrete products and coal, had earning after taxes in 1958 of more than $10 million from the assets to be acquired by General Dynamics Corporation.

Stromberg-Carlson Names Planning Mgr.

SAN DIEGO — Franklyn E. Dailey Jr., has been appointed manager of planning for Stromberg-Carlson, San Diego.

Dailey graduated from the United States Naval Academy in 1942 and won his wings at Pensacola in 1945. He continued his education at various special service schools and was awarded a master of science degree in Applied Physics by the University of California.



"Frankly I think that caddy has something on J. P."

Vieweg Transferred To Washington Post

GROTON — Walter V. R. Vieweg, formerly assistant chief research and development engineer for Electric Boat, has been transferred to the General Dynamics corporate staff and stationed in Washington, D.C.

Vieweg's former administrative duties have been assumed by Victor T. Boatwright, who has been named special assistant to Dr. Herman E. Sheets, chief research and development engineer.

Governor for a Day Appoints Jerry Ray

Title of honorary Texas Colonel has been bestowed upon Convair Fort Worth's J. V. "Jerry" Ray in Dept. 6-2.

Ray, a weights group engineer, received the honorary commission when his friend, Senator Jarrard Secrest, took over as governor one day in absence of Gov. Price Daniels.

Senator Secrest sent Ray a 9 x 11 graduation-type diploma notifying him of the appointment. He said it had the official Texas seal, too.

Willard Luppke, 46, With Convair Over 25 Years, Dies at SD

Willard Luppke, 46, who had been with Convair SD over 25 years, died suddenly July 25.

A manufacturing control assistant foreman at Plant 2 since 1954, Luppke joined Consolidated Aircraft in Buffalo, N. Y., in March, 1934, as a stock clerk. He came with the company to San Diego in 1935 and served in a range of departments, dispatching, production, purchasing, tool manufacturing and control, production control, and manufacturing control during his long career with Convair. He had held positions as assistant tooling supervisor, tool control supervisor, and production control foreman.

He was also active in CRA bowling circles and a member of the Convair SD Management Club.

Survivors include his wife, Marie; a son, David; his parents; and a sister, all of La Mesa.

Students Will Hear SD Tooling Experts

Members of the junior chapter of American Society of Tool Engineers will hear two Convair SD tooling experts speak at the Aug. 14 meeting.

C. E. Plummer and W. L. Carr, both senior manufacturing development engineers at Plant 2, will be on the program. Plummer's topic will be "High Temperature Alloys," while Carr will talk on "Sub-Zero Machining."

Members, all students still in training, will meet at 7:30 p.m. in the conference room of the I.A.M. Lodge, 3911 Pacific Highway.

Convair Scientists To Teach Courses

Two Convair scientists will teach courses this fall in the San Diego State College Campus Evening Program.

Walter S. Bradfield and Ching H. Yang, both of Convair scientific research laboratory, will be instructing in the graduate program in mechanical engineering. Bradfield will teach a course in thermodynamics and Yang, one in dynamics of machinery.

Graduate students must register by Sept. 11. Admission information may be obtained by calling JU-2-4411, ext. 271.

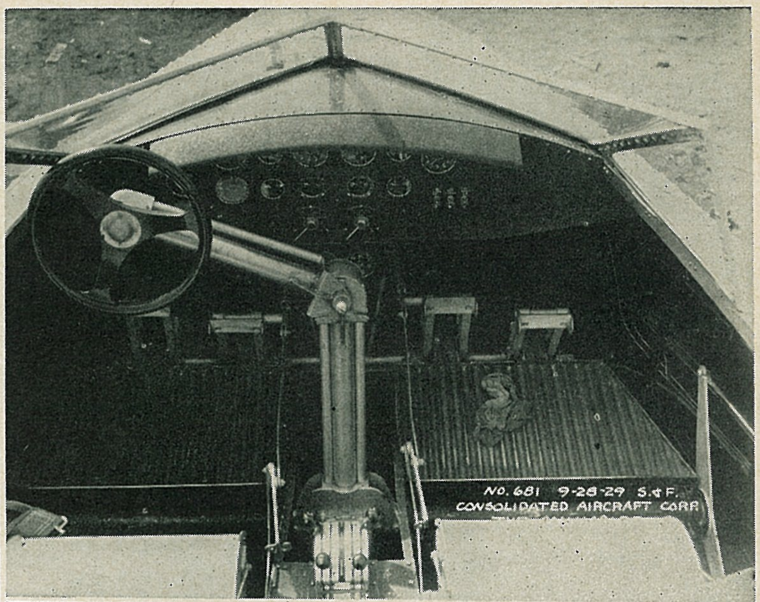
Convair Son Wins Fleet Scholarship

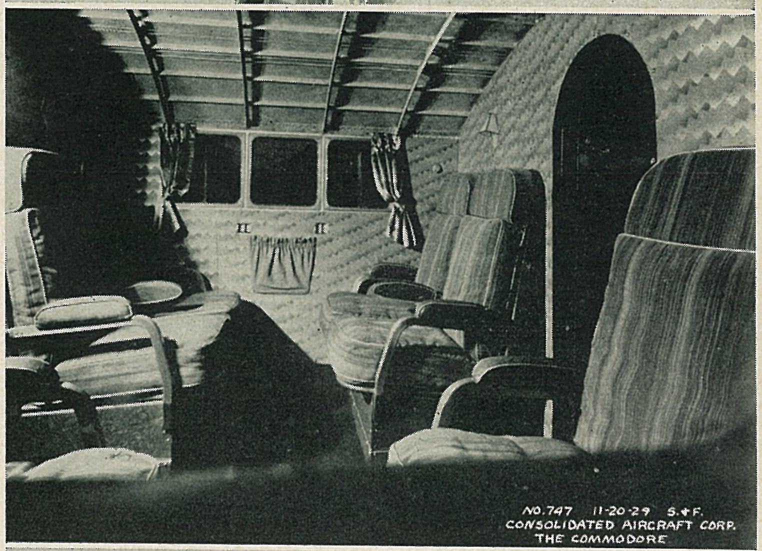
The Fleet Foundation, established 18 years ago by Maj. Reuben Fleet, founder of Consolidated Aircraft, last month awarded a scholarship to a Convair son.

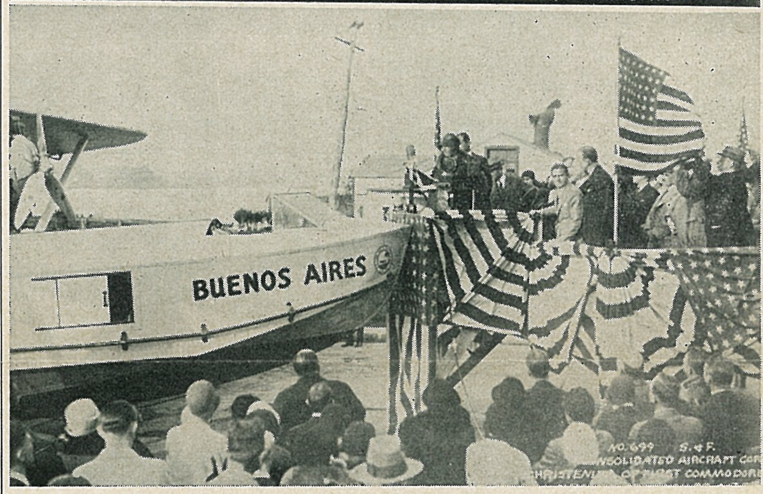
Leavitt Lee Thurlow, son of L. W. Thurlow (Dept. 15-3) was selected by the Foundation as one of the scholarship winners for 1959. He will attend the University of Southern California in the fall.

SEMINAR CHAIRMAN

ROCHESTER — George A. Peck, vice president and general manager of Electronics Division of Stromberg-Carlson, chairmanned an American Management Association seminar at Colgate University last week.







LUXURIOUS—Well, luxurious for 1929, anyhow. At top is Commodore's flight deck. Center is passenger compartment (there was room for 22 customers). Below, first flying boat is christened by Mrs. Herbert Hoover.

$15,000 Journey to Buenos Aires Paves Way for Start of Nyrba

(Following is another installment in continuing history of Convair. This is No. 14.)

Domestic airlines had been offered strong overseas inducements in the Kelly Foreign Air Mail Act of 1928. The Post Office Department was authorized to pay contractors up to $2 a route mile. Pan American Airways, already in the field with a Florida-Cuba service, explored routes and acquired terminal rights deep into Latin America.

This was the background against which a new airline emerged early in 1929. The promoters were Reuben Fleet of Consolidated Aircraft; James H. Rand Jr. of Remington Rand; and Capt. Ralph O'Neill, a World War I flyer who had been aviation adviser to the Mexican Army in the mid-20s.

It was a speculative venture at first. Fleet and Rand put up about $15,000 to finance O'Neill on an exploratory trip through South America. The three were to share equally if the venture bore fruit. O'Neill's contribution was his knowledge of aviation and a fluent command of Spanish.

O'Neill found Pan American everywhere in control along the west coast, but in Buenos Aires he was able to obtain a remarkably favorable contract. This provided that all Argentine mail destined for North America would be carried by the new line at $10 a pound, until the line was carrying one fourth of the total of such mail. Moving north to Rio de Janeiro, O'Neill negotiated a similar contract. Pan American soon offered to buy out the three partners for $250,000 each, according to Fleet, but they agreed to decline the offer.

In April the line's name was announced—the New York, Rio and Buenos Aires (Nyrba for short) and an order for six 22-passenger flying boats was placed with Consolidated. Upon incorporation, O'Neill was elected president of Nyrba. Directors included Fleet, Rand, Frank C. Munson of the steamship line, and others. Through a public offering of stock the working capital was increased to $6,700,000.

At Buffalo, work was humming at what was called "Unit 2." This was housed in 68,000 feet of additional floor space in an adjacent area of the old Curtiss plant. The new flying boat, named the Commodore, was identical to the XPY-1 except for the hull, which was divided into luxuriously fitted passenger compartments. The first boat was launched in the Niagara River Sept. 29, 1929. It was flown to New York (where heavy fogs spoiled the effect of its flight past Manhattan) and thence to Washington, D.C. In ceremonies at the Naval Air Station Oct. 3 it was christened "Buenos Aires" by Mrs. Herbert Hoover, then the first lady. (As the nation was dry, she broke a bottle of non-alcoholic "champagne cider" across the boat's nose.)



AERIAL "FUTURE"—Fred Sloan of Convair FW industrial facilities used aerial photo of Fort Worth plant—and paintbrush—to produce preview of new B-58 production field operations stations now being built along Grant's Lane.

Panel For 880 Designed For Minimum of Noise

Now going into the fifth Convair 880 are the overhead hat rack panels made especially for the interior of Convair's huge jet transport.

Designed by Convair SD engineers, the fiber glass canopies are more elaborate than any used in other Convair transports, with the panels shaped to fit the contour of the plane.

"The 880 panels have been acoustically designed to minimize noise in the airplane," explained Richard Parsons of the 880 project office.

Two of the panels containing passenger convenience pods are going into the club compartment while six, three on each side, will be installed in the passenger section. Four stowage compartments are placed in between the panels on both sides of the plane.

Each passenger convenience pod contains individual air outlets, oxygen, reading light, and stewardess call, while wiring for the public address system and ducts for the heating and air conditioning are attached to the panels.

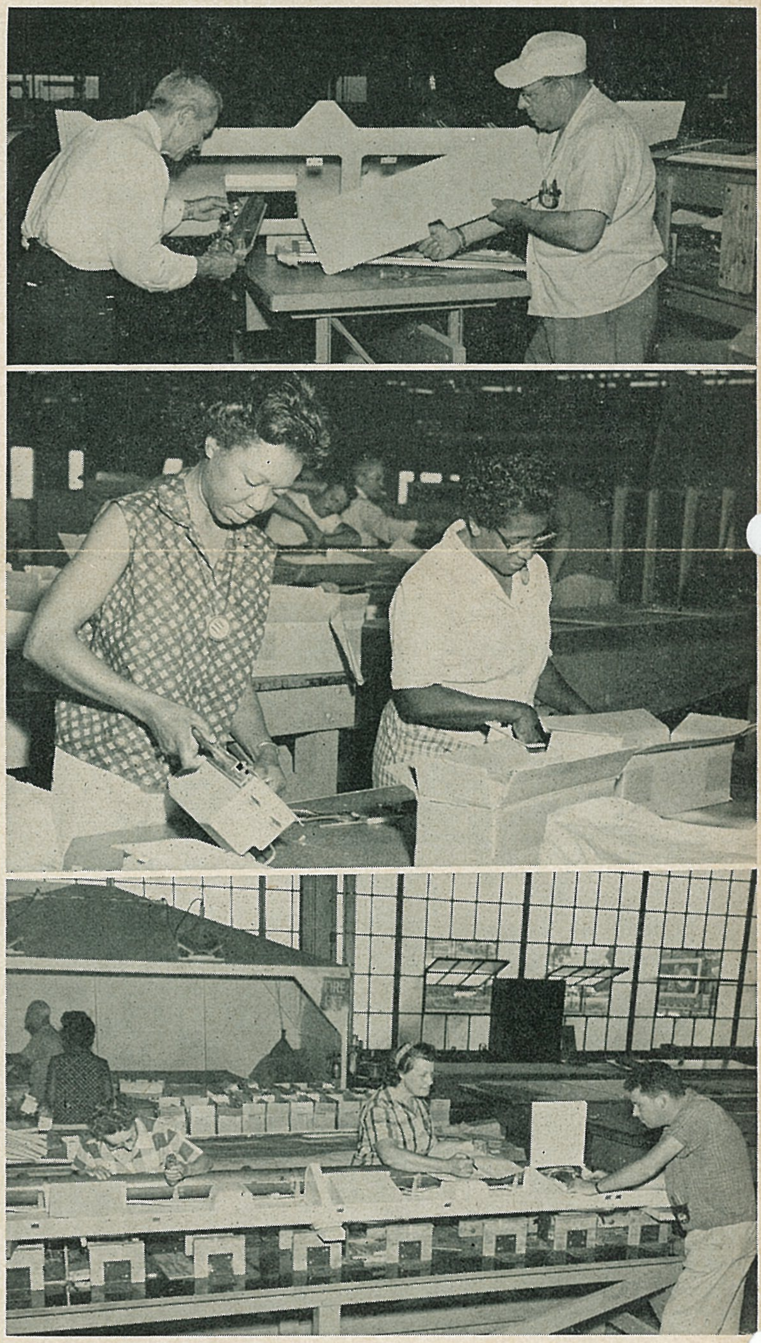
Assembly of the first 40 ship sets is being done by SD tubing and fabric, under L. R. House, general foreman, on the mezzanine of Bldg. 3 at Plant 1. "We have 23 people now working on assembly of the panels," said N. T. Maisheff, Dept. 117 assistant foreman. "And we have already completed the first set which went into plane No. 4, first plane to have interior trim installed."

Components of the panels are subcontracted, although metal brackets and electrical harnesses are being made at Convair SD.

Nimble-fingered girls put together the different articles which go into the oxygen kits, first to be placed on a Convair transport.

"Low velocity air outlets designed with emphasis on acoustical objectives are also an innovation with the 880," continued Parsons. "Draft and noise-free, they will make the plane more comfortable for our passengers."

Panels will be covered with plastics and materials to match interior color scheme and decor of the different customer airlines' planes.



880 PANEL ASSEMBLY—In top shot N. T. Maisheff, Dept. 117, assistant foreman at Convair SD, and D. E. Wilkinson (Dept. 117) inspect rear stowage box to go into fifth Convair 880. In center, Daisy Adams and Nettie Page assemble oxygen boxes, part of equipment of hat rack panels, while in bottom picture, from left, Faith Hoag and Eula Farnsworth, both Dept. 188, inspect panel on which Jack Ropon (Dept. 180) is working.

Drivers Under Age 25 Most Accident Prone

A four-week "off-the-job" accident injury survey (Convairiety, July 22, 1959) among Convair San Diego Division employees indicated that autos were involved in about one-fourth of the accidents, but this category outranked all others in severity.



M. C. Val Dez

"Nationally, in 1958 there were 36,700 deaths involving autos, and 2,825,000 injuries," M. C. Val Dez, SD Division chief safety engineer, reported.

"In all fatal accidents, exceeding the speed limit was the greatest single cause, accounting for 43 per cent. On the wrong side of the road was the next in rank, at 16 per cent, and failure to observe right-of-way followed at 13 per cent."

During last year, drivers under age 25 were involved in, if not actually responsible for, 27 per cent of the fatal accidents and more than 20 per cent of the non-fatal accidents. Drivers in this age bracket constitute no more than 14 per cent of all licensed drivers, Val Dez pointed out.

"In 1959 an estimated 900,000 young men and women will become of driving age. Some of these, of course, will be Convair sons and daughters. Convair parents can do nothing more important to safeguard their children's safety than to insist that the youthful drivers know all the finer points of safe driving and to drum, drum, drum on their importance."

* * *

Question: You are driving down a highway at night. The bright lights of the oncoming car blind you. Do you (a) counteract the effect of the other car's brights by flicking on yours? or (b) speed up so you can get past the other car more quickly? or (c) slow down and keep your eyes on the right edge of the road?

If you picked "c" you are hep to the safer points of driving, according to the National Safety Council.

Question: If the wheels of your car go off the right side of the road and onto a soft shoulder, you should (a) jerk the wheel to the left before the tires have a chance to sink down? (b) hit the brakes to stop the car quickly? (c) take your foot off the gas pedal and wait till your car slows down before returning to the highway? Answer (c). Keep a firm grip on the steering wheel and your foot off the brake and accelerator until your car slows down. Then—not before—turn the wheel sharply toward the pavement.

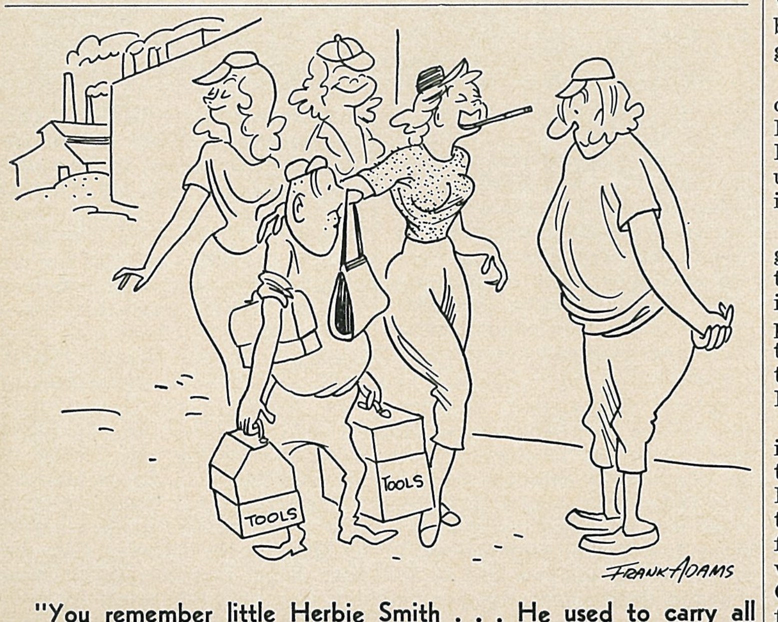
Question: Good drivers know they should brake (a) before entering a curve? (b) on the curve? Answer: (a). Never brake on a curve. It can cause a skid. Good drivers cut their speed in advance so they can accelerate very slightly as they round the curve.

Question: It is advisable to slow down below the posted speed limit when (a) other traffic is whizzing past you? (b) it's raining? or (c) a police car is behind you? Answer: (b) Speed limits are set for normal, good-weather conditions. Slow down in bad weather.

SD Library Seeking Historical Manuals

To augment its aviation historical collection, San Diego Public Library is asking Convair people for used aeronautics or aeronautical engineering material.

The city library is interested especially in old brochures, engine repair manuals, old annual reports of aircraft companies. Books, pamphlets, magazines, or any kind of material dealing with aeronautics will be accepted at the information desk of the central library or any of its branches.



"You remember little Herbie Smith . . . He used to carry all our books to school for us!"

Lost $20 Returned To Grateful Owner

Lily Kieliscek (SD Dept. 138) inadvertently dropped a $20 bill in a restroom in Bldg. 3, Plant 1, a couple of weeks ago. Searching everywhere, she was positive that it was gone for good.

Meanwhile, Doris Harrison of Dept. 129, who had found the bill lying on the floor, was inquiring throughout the area for the person who had lost the money. Friends directed her to Lily, to the latter's great relief.

BRITISH VISITOR FINDS CONVAIR'S PLANTS CLEAN, SAFE

England's Ken Harrold stopped by Convair Fort Worth on his way back to Great Britain after spending a "fortnight" with Atlas engineers at Convair Astronautics.

Harrold, chief designer of the IRBM structure for DeHaviland Aircraft Co. in Hatfield, England, said his company has a commercial agreement with Convair Astronautics which enables their engineers to visit.

"We're hoping that Convair will eventually send some people over to see us on an exchange basis," he commented. "Now we're sending about four people every six weeks to Convair Astronautics from our plant in England."

Harrold said he was amazed at the size of the Convair plants. But the thing that impressed him most was good housekeeping.

"I say, you chaps have clean and safe plants," he commented about the Fort Worth facility just before leaving at tea time.

North Africa Greets 102s

First F-102s to arrive on the North African continent swept down on the Tripoli site of Wheelus Air Base last month to begin an advanced training program.

Four of the Convair jet interceptors, assigned to the 525th Fighter-Interceptor Squadron at Bitburg, Germany, flew to Wheelus to begin check-out of pilots in the weapon system.

The rotational training program will see F-102s arriving at the USAFE Weapons Center base in groups of four at a time. First pilots to undergo the training in the F-102s were Maj. B. H. Barton, Capt. Ray Girard, Capt. Don Leonard, and Lt. Alan L. Lomax.

Convair San Diego field service representative, G. S. Matthews, will be at Wheelus Air Base for two months to support the F-102s on the site. There from Bitburg to lay the groundwork for the F-102 program were Convair SD men, O. B. Johnson, field service rep, and Norman Picard of service parts.

Taxiing Amphibian Challenges EAL Convair on Tampa Runway

An alligator recently challenged a Convair-Liner in Tampa, Fla., according to F. H. Hollingsworth, Convair field service engineer in Florida.

Seems an Eastern Air Lines Convair, landing in a heavy rain, found Runway Nine occupied by an alligator which had not advised the control tower of its intention to taxi.

When the gator failed to file flight plan, three EAL ramp servicemen stalked the violator. The gator turned out to be an angry female over eight-feet long.

While Mrs. Gator busily bit the muffler off the Eastern pick-up truck and crushed the bottom of the door with her jaws, the agents managed to secure her business end with a rope and return her to the terminal.

There she proved to be a very irate customer. But with a great deal of advice and encouragement she was persuaded to file flight plan to the Tampa Zoo.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

Vol. 12, No. 16 — Wednesday, August 5, 1959

San Diego EDITION (Serving San Diego Division of Convair)

SD Division news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



"RX" WINNERS—Two Convair Palmdale men, J. H. Tanner (on left) and R. E. Gumtz (on right), last week received checks for $500 and $1,000, respectively, as winners of June "RX" awards. A. W. Morgan, Convair SD assistant manager-operations, made presentation.

Redesigned Landing Gear Brace Effects Large Saving for 600

A saving of $117,550 on the first 25 Convair 600 jet transports to be built for American Airlines has been announced by W. R. Bruce, Convair SD manager of material.

Redesign of the structural brace for the main landing gear system for Convair's newest transport, to go into production this fall, has resulted in reduction in cost of the components.

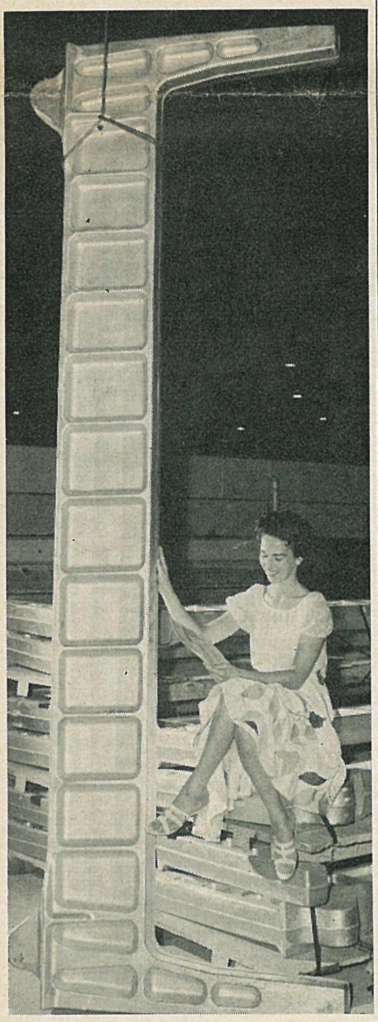
As long ago as November of last year, Convair SD engineers were studying the Convair 600 side brace for the main landing gear system to effect possible saving in both weight and cost. They came up with the new design calling for a solid aluminum forging to replace the piece-by-piece assembly method used for side braces for the Convair 880 landing gear system.

Working closely with Wyman-Gordon Co. of Worcester, Mass., subcontractor, from early stages of design to current production, Convair SD has been able to realize a saving of $4,702 on each plane without changing the weight, Bruce explained.

"This is an outstanding instance in which cooperation and assistance given SD purchasing department by both Convair engineering and the vendor enabled us to accomplish a very substantial saving to the company," he remarked.

Eleven of the huge 12-ft. long, 800-lb. forgings have been received at Rose Canyon warehouse with 19 more of the first order of 50 due in shortly. A pair will be used on each plane. The solid forgings, said to be the largest close-die aluminum forgings ever made for a commercial plane, were designed for greater strength as well as greater economy, explained SD engineers.

Besides the actual dollar savings in production of the components, cost of assembly of parts into the plane undoubtedly will be reduced since there are fewer pieces to be installed, concluded Bruce.



SOLID BRACE—Joan Molenhouse of Convair SD Dept. 34 checks receiving papers at Rose Canyon for 12-ft. aluminum forgings made for Convair 600 main landing gear side braces.

Enrollment Dates Set for College

Convair San Diego people planning to register for the evening program at San Diego College this fall were reminded this week that undergraduates must register by Aug. 14, and graduates by Sept. 11.

Season's Last Free Padre Baseball Tickets Will Be Drawn Afternoon of Aug. 12 at SD

Baseball fans at Convair SD will get a fifth and last chance to win free seats for Padres baseball games when CRA sponsors its final drawing of the year.

Deadline for entries is Aug. 12 at 4 p.m. Tickets will be good for games to be played between Aug. 18 and Sept. 5 at Westgate Park when the Padres host Phoenix, Salt Lake City, and Sacramento.

To enter, write name, clock number, shift, department number, location and telephone number on a slip of paper. Two tickets will be awarded each winner but only one entry per person is allowed.

Boxes are located in employee services, Plants 1 and 2; at Rose Canyon, in the office of Dorothy Kniffen, Bldg. 2, ext. 2239; Fordham St., office of Bessie Cooper, ext. 100; gun butts, field operations inspection office; ramp, thermodynamics laboratory.

Dynamics Tests Moving Into New Building

Test equipment is now being moved into the new general test building (Bldg. 72) just completed for engineering's dynamics laboratories at Convair SD Plant 1.

All equipment is scheduled to be moved into the new one-story steel structure and operation of tests should be under way by the middle of August, said M. C. Brady, chief of SD dynamics lab.

The new building, south of the 880 wooden mockup building, adjoins Bldg. 79, high temperature hydraulic and high pressure pneumatic facility.

Built at an approximate cost of $200,000 by Diversified Builders, Inc., of Los Angeles, under supervision of SD plant engineering, the new building will house dynamics lab test equipment formerly located on the first floor of Bldg. 51. Area vacated will be used for expansion of the SD physics lab.

"The new facility will allow us to integrate dynamics lab test operations in the two connecting buildings," said Brady. "The hydraulic and pneumatic tests conducted in Bldg. 79 can be closely supported in Bldg. 72, resulting in a more efficient testing procedure."

Housed in the new building will be equipment for controls systems tests for the F-102 and F-106, and, probably by this fall, a control stand for the Convair 600 jet transport.

Being moved into the new 15,600-sq. ft. area is the F-102 "iron horse"—simulator with the same configuration as the jet interceptor mounted on a steel "backbone" structure with all electrical wiring and plumbing connected to the pilot's controls. This stand is currently in use for development of an "electric stick" flight control program. The F-106 simulator is a prototype plane minus only the engine and landing gear.

With the two controls systems test simulators pilots can learn how to operate speed brakes, landing gear, to control flight maneuvers, and, in the case of Convair's interceptors, how to operate the weapon systems.

A flight simulator to give pilots the feeling of flying, and six hydraulic test benches for checking hydraulic equipment also are being moved into Bldg. 72. One hydraulic test bench is 150 hp for controlling hydraulic pressure and flow in checking out hydraulic fluid which will be used in TWA and Delta Convair 880s. Five other hydraulic test benches, 40 hp each, are used for Mil-F-5606 hydraulic fluid used in other

(Continued on Page 2)

SD Reshuffling To Make Room For Mfg. of 600

Getting ready to swing into production of the Convair 600 jet transport, Convair San Diego is in the midst of a gigantic reshuffling program.

Over 100,000 sq. ft. of space in San Diego's Plant 1 buildings is being cleared especially for 600 operations, said R. D. Marks, chief of SD manufacturing planning and methods. All factory buildings at Plant 1 will be involved in the shifts before this fall, when the 600 goes into production.

Bldgs. 1, 2, and 3 at Plant 2 have also been drawn into the "fruit-basket-upset" game with 150,000 sq. ft. being made available to take care of Astronautics people from Plant 1. Other Plant 2 arrangements have been made for the phasing in of the F-108 wing.

"Strategy of our entire moving program, which has been under way since March, is based on placing like operations of the 600 and 880 as close together as possible," explained Marks. "We will, in this way, be able to make the most economical use of manpower and facilities and to reduce component handling to a minimum."

With Convair SD planning to take over production of many components of the 600, which are being subcontracted for the 880 and because of the new parts peculiar to the 600, more space will be required for the jet transport program.

Largest new area to be diverted to 600 operations will be in Bldg. 4 where 40,000 sq. ft. in the east central section, from Col. 21 to Col. 40, will be occupied by pod and pylon assembly.

Starting last weekend Astronautics people began to move from Bldg. 4 to the newly-completed office building at the Kearny Mesa site. Others will go to San Diego Plant 2 as space becomes available.

(Continued on Page 2)

146 Pints of Blood Collected on Visit

First-shift donors at Convair San Diego Plant 1 helped put the company's credit at the San Diego Blood Bank in the black with a boost of 146 pints collected at the July 23 bloodmobile.

Next bloodmobile visit has been scheduled for Aug. 27 at Plant 2, said Ken Wulfemeyer of SD employee services. Day shifters will be able to sign up through their supervisors next week after cards have been issued.

Laboratories In SD Bldg. 5 Rehabilitated

First phase of rehabilitation of materials and processes laboratories on the first floor of Bldg. 5 at Convair San Diego Plant 1 is in full swing.

Current remodeling, estimated at $272,000, will see 3,400 sq. ft. of new area added to the laboratories located in the northwest corner of the building, said W. M. Sutherland, group engineer of the materials laboratories. Completion is slated for Dec. 1 of this year.

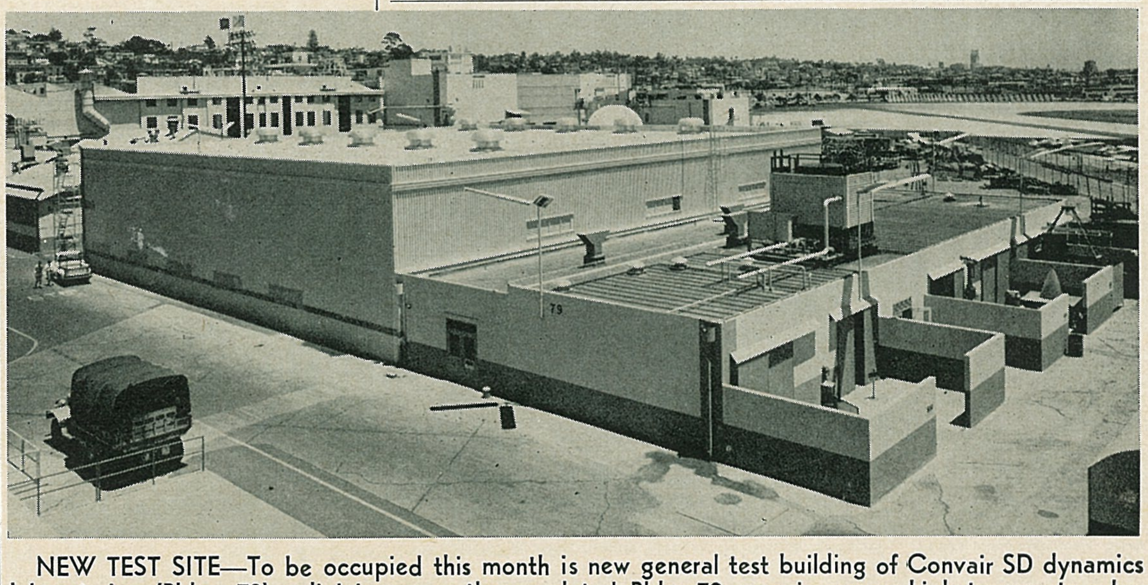
To be added to lab facilities is an environmental room to obtain variations in temperature and humidity simulating those occurring in the plant during application or storage of materials, said J. C. George, coordinator of the rehabilitation project.

The new facility will make possible the testing of materials to tell how their properties may change in a variable temperature range of 40 to 90 degrees F. and a humidity range of 20 to 90 per cent. In conjunction with the room will be a special spray booth in which such coatings as Scotchweld primers, lacquers, enamels, epoxy and acrylic resins can be applied at different temperatures and humidities for tests.

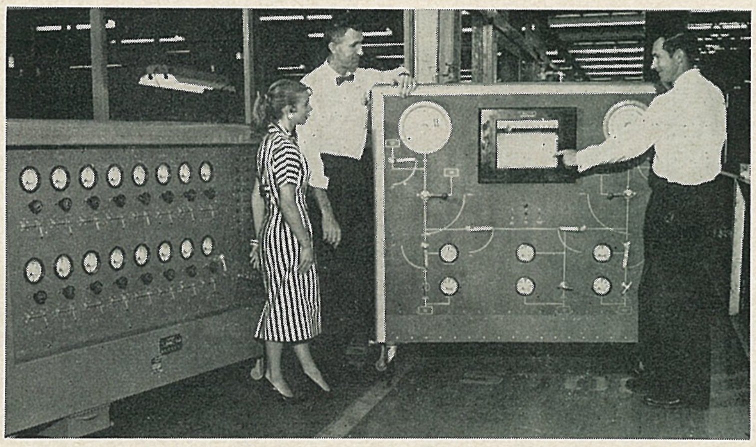
Rearrangements within the laboratories to allow for expansion of present operations will see the following activities moving into the new area: corrosion lab, finishes lab, accelerated weathering, electrochemistry, ceramics, chemical processes, and paint application.

In the current phase of the program the 750-sq. ft. area located at the northeast of the lab also will be remodeled. It will be used for spectroscopy, microanalysis, and fungus tests.

The latter part of this month 35 people—engineers, supervisors, and secretaries—will move from the lab location to new office space on the second floor of Bldg. 5.



NEW TEST SITE—To be occupied this month is new general test building of Convair SD dynamics laboratories (Bldg. 72) adjoining recently-completed Bldg. 79, now in use as high temperature hydraulic and high pressure pneumatic facility at SD Plant 1.



NEW LOOK—Control panel on vacuum brazed control cart for F-108 wing project, largest ever photo-etched at a Convair division, is examined by (from left): Betty Tyler (Dept. 603), J. D. Seymour (Dept. 603-5), and J. D. Zeliff (Dept. 603-5). At left is Convair version of F-106 fuel checkout. Its panel was also photo-etched at Convair SD's Plant 2.

Record Size Panel Photo-Etched For F-108 Wing Project at SD

Making "faces" is a specialty of the photo reproduction department at Convair SD's Plant 2. Last month they made the longest and widest "face" ever photo-etched at a Convair division.

The latest and largest "face" is an acid etch aluminum control panel for the vacuum brazed control cart for the F-108 wing project.

In addition to acting as a support board for indicator dials, its "face" is also "wrinkled." On it are etched functional lines that show how the equipment operates.

Other panels etched at Plant 2 are now being used at Cape Canaveral, fronting the intricate array of instruments needed to control and check out the Atlas.

Joe Kersey, assistant foreman in Dept. 603, said the panel completed last month is 47 in. x 60¾ in. on 3/16-in. aluminum plate.

"Advantages of the photo etch system include a cleaner and more durable panel," Kersey said. "The lettering is raised and less easily obliterated and scratched."

The photo etch process is also used at Convair SD to manufacture tool tags, switch plates and circuit boards.

DELTA CLUB ELECTS VIRGINIA REYNOLDS

Virginia Reynolds of Convair Astronautics (Dept. 325-2) was installed last month as new president of the Delta Toastmistress Club in ceremonies held at the Embassy Hotel July 14.

She succeeds Mary Smith of SD-Dept. 6-21, retiring president.

Other officers seated were Gertrude Maddow (SD-Dept. 6-32), vice president; Lee Betts, secretary; Freda LaFrenere (SD-Dept. 6-70), treasurer; Mary Smith, club representative. Martha Woodberry, CRA women's activities commissioner at Convair SD, was named membership chairman.

Installing officer was Jack Spradley of the Hospitality Toastmasters Club.

Meetings are held the second and fourth Tuesday evenings at the Embassy Hotel. Information can be obtained by calling Martha Woodberry, ext. 1245, Plant 1, Convair SD.

Judo, Baseball To Be Combined At Sports Night

A combination of judo and baseball will be on tap Aug. 18 at Westgate Park when the Convair SD Management Club presents its annual Sports and Family Night.

The club has reserved 1,500 seats on the third base side of the Padres' home field for the event. Tickets, priced at $1 for adults and 50¢ for children, are now being sold through the usual departmental outlets.

The program will start at 7:30 p.m. when members of the Southern California School of Judo and Ju Jitsu demonstrate judo and aikido techniques. Featured will be Tokuji Hirata, who holds the fourth degree black belt, and three aikido specialists, in addition to students at the school.

In the aikido demonstration one man will defend himself against several attackers at the same time.

The 8:15 baseball game will pit the Padres against Phoenix.

Trout, Yellowtail Win Fishing Prizes

Two rainbow trout and two yellowtail catches won prizes in the June fishing contest sponsored by the CRA Fishing Club.

J. J. Sopko (Dept. 25-6) and his wife, Tillie, placed first and second with rainbow trout of 14½ inches and 14 inches.

John Grantham, son of G. G. Grantham (Dept. 230), placed third with a yellowtail that weighed 19 lbs., 4 oz., followed by Richard F. Summers (Dept. 6) with a 17-lb., 9-oz. yellowtail.

SD Division Space Reshuffled To Make Room for 600 Mfg.

(Continued from Page 1)

By the end of August 25,000 sq. ft. will be cleared for the installation of pod and pylon tooling with the entire space to be available by late this year.

Size of the 600 pod and pylon necessitates the occupancy of the high bay area in the building to allow use of the overhead cranes for handling of the large power plant assemblies.

Other moves within Bldg. 4 have seen tool manufacturing jigs and fixtures come from Bldgs. 1, 2, and 3 to be centralized on the west side of the building.

In Bldg. 1 operations for leading edges for the 600 and fairings for both the 880 and 600 will be activated in 11,000 sq. ft. in the west central high bay area. Room has been arranged for both 600 and 880 doors in the welding department's area at the northeast corner of Bldg. 1. Bench sub-assembly (Dept. 120) for both 880 and 600 programs and 600 wing tip operations is located on Bldg. 1's northwest mezzanine.

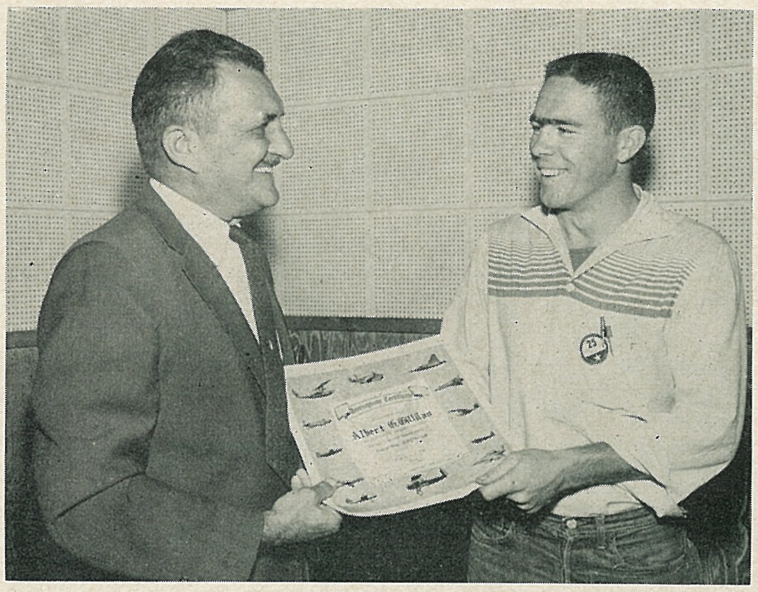
On the northeast side of Bldg. 2, room is now being made available for manufacture of trailing edges and anti-shock bodies for the 600. Now being prepared for occupancy is 20,000 sq. ft. with tooling to move in by the end of August and production to start in mid-November.

Other Bldg. 2 changes are rearrangements, affecting mostly Dept. 144, wing spar assembly, and Dept. 143, wing bulkheads, being made to phase in peculiarities of the 600. Where possible, common fixtures will be used for both the 880 and 600, even though modifications may be needed to take care of 600 parts.

An aluminum honeycomb processing area will be located in the south end of Bldg. 3 where Dept. 129, production plastics, is being rearranged to provide 25,000 sq. ft. of dust-free space for honeycomb production. Honeycomb panels will be built there for the 600's flaps, ailerons, spoilers, anti-shock body floors, trailing edges, and center tie-box floors.

Beltframes and bulkheads operations in the east bay of Bldg. 3 have been relocated from Bldg. 2 to allow for phasing in of 600 production. Only other Bldg. 3 area reserved specifically for the 600 is the 9,000 sq. ft. occupied by the 600 metal mockup in the northeast section of the building.

In the experimental high bay area of Bldg. 5 a space encompassing 6,000 sq. ft. will be cleared by mid-September for 600 flaps and 600 and 880 ailerons. Production will start in October.



JOURNEYMAN—Albert Gillilan (right) receives journeyman's certificate from H. A. Smith, chief plant engineer at Convair SD, after completing four-year apprentice training. He is now an industrial electrician in Dept. 25.

★ Convairiety ★

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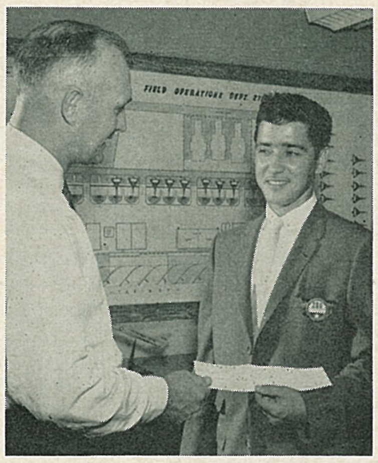
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Alyce Martin. News contacts: AFMTC, Bobbie Waddell, ext. 3038; Vandenberg AFB, Bunny Ingraham, ext. 8-3258; Warren AFB, Ernie Galbos, ext. 832.

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Pomona Editorial Offices, Room K-222. Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



LUCKY NO. 19—B. J. Moreno (at right), Convair SD proof planner, receives check from E. L. Williams, Dept. 200 superintendent, as part payment for 19th Employee Suggestion.

PERSEVERANCE PAYS HANDSOMELY FOR SD PROOF PLANNER

No. 19 proved to be the lucky number for B. J. Moreno, Convair San Diego proof planner at Plant 2.

Moreno (Dept. 280) will get $1,025.90 for his 19th Employee Suggestion submitted during the last three years, the only one to be accepted for an ES award. Since submitting his winning suggestion, he has sent through eight more.

By adopting Moreno's idea, Convair SD now will fabricate the air-tight feed-throughs for harnesses on the F-106. The feed-throughs which carry the harnesses through bulkheads and floor of the cockpit, were formerly purchased from vendors.

Manufacture of feed-throughs in the plant will save the company $10,259 a year by elimination of rework necessitated by constant engineering changes, as well as cost of ordering, handling, and inspection.

Moreno received a check for $513, half the award, the latter part of July and will get the balance in six months if the estimated savings are realized.



SHOWMAN—Convair Management Club members at July meeting were entertained by organ playing of SD security guard Harold "Sam" Sturdevant.

Bond Elected By Accountants

Roy Bond, tabulating methods supervisor at Convair SD, recently became the first Convair man to be elected president of the San Diego Chapter of the National Machine Accountants Association.



Roy Bond

He was also elected as a national director of the organization and is the first San Diego man to hold both offices at the same time.

Two other Convair SD men were also installed. They are D. L. Theademan, senior EDPM programmer, treasurer; and G. O. Withem, data processing general supervisor, director.

NMAA is an international professional organization of supervisory and staff personnel in data processing, accounting, systems and other related functions.

FULL USE OF MAIL SERVICE IN SD AREA URGED AS ECONOMY

Convair people are urged to make full use of the company's mail service between locations in the San Diego area and off-site bases.

According to R. I. Morse, manager of Convair office services, several thousand dollars a year can be saved in postage if full advantage is taken of the company's regular mail deliveries.

Three runs are made each day from Convair San Diego to the Astronautics plant at Kearny Mesa. Two deliveries are made daily by Convair-operated aircraft to Palmdale-Edwards facilities and one to Holloman AFB.

Besides the regular mail service between Convair locations, a delivery is made daily from the Convair SD plant to Stromberg-Carlson and General Atomic in San Diego.

Dynamics Tests Move Into New Building

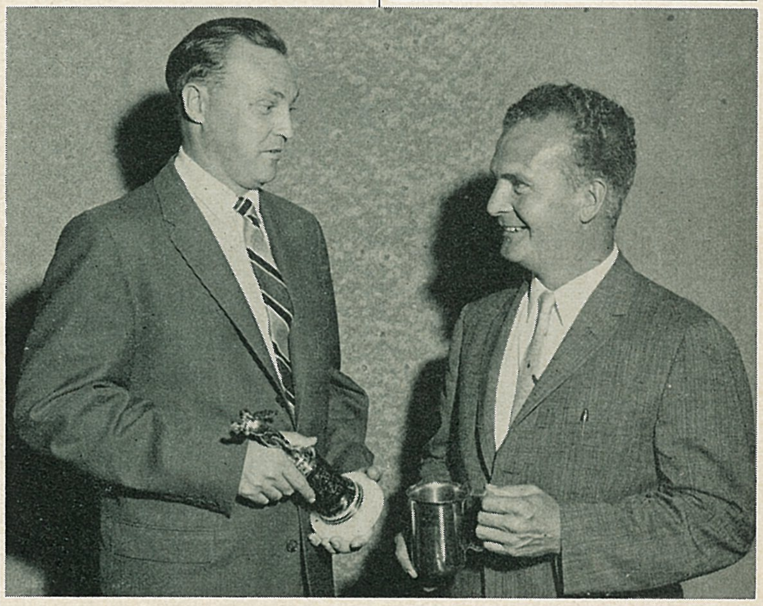
(Continued from Page 1)

Convair planes, both interceptors and transports.

Electric power available for the test building is 2,000 kilovolt amperes—roughly the equivalent of 2,000 hp.

Fifteen engineers of dynamics laboratories will be setting up tests under direction of J. W. Mansfield with about 25 shop mechanics of Dept. 31 operating the test equipment.

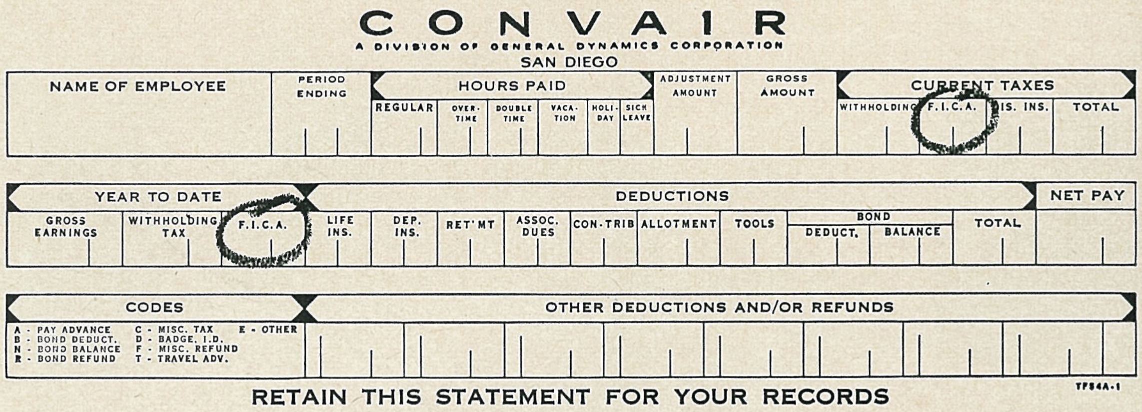
"We feel that we have a more adequate test site, not only for our present tests involving Convair planes," explained Brady, "but, looking to the future, for testing operations which will ultimately be necessary in the more advanced missile and space programs."



CLUB WINNERS—R. L. Heckel, Dept. 34-2 (on left), winner of MacSave-it award for June, and William S. Childs (Dept. 6), July Man of Month selection, received awards at July 22 meeting of Management Club. Not available for picture was R. H. Feeley (Dept. 34-2), joint winner with Heckel for MacSave-it award.

It Might Interest You To Know . . .

Convair employees are "paid" about 17½ per cent more in benefits than appears on their paychecks.



CONVAIR
A DIVISION OF GENERAL DYNAMICS CORPORATION
SAN DIEGO

NAME OF EMPLOYEE | PERIOD ENDING | HOURS PAID: REGULAR, OVER-TIME, DOUBLE TIME, VACA-TION, HOLI-DAY, SICK LEAVE | ADJUSTMENT AMOUNT | GROSS AMOUNT | CURRENT TAXES: WITHHOLDING, F.I.C.A., DIS. INS., TOTAL

YEAR TO DATE: GROSS EARNINGS, WITHHOLDING TAX, F.I.C.A. | DEDUCTIONS: LIFE INS., DEP. INS., RET'MT, ASSOC. DUES, CON-TRIB, ALLOTMENT, TOOLS, BOND: DEDUCT., BALANCE, TOTAL | NET PAY

CODES: A - PAY ADVANCE, B - BOND DEDUCT., M - BOND BALANCE, R - BOND REFUND, C - MISC. TAX, D - BADGE, I.D., F - MISC. REFUND, T - TRAVEL ADV., E - OTHER | OTHER DEDUCTIONS AND/OR REFUNDS

RETAIN THIS STATEMENT FOR YOUR RECORDS

For Social Security (F.I.C.A.)
YOU will pay up to $120 in 1959. Convair paid $5,930,502 in 1958 and will pay more than that in 1959.

To finance benefits called for in the Federal Insurance Contribution Act, usually called Social Security, the federal government divides the cost of this protection for individuals about equally between employee and employer.

The employee pays 2½ per cent of the first $4,800 earned in a year (which amounts to $120) by payroll deduction. If weekly gross pay is $100, the deduction is $2.50 a week until $120 has been deducted, at which time the deduction ceases until the following year.

This rate went into effect Jan. 1, 1959. During 1958 the rate was 2¼ per cent of the first $4,200. In 1958 Convair employees contributed about $5,930,502. Convair's contribution to Social Security on behalf of its employees was a like sum. During 1959 the amount deducted for Social Security from employees' paychecks is larger because of the higher rates. During 1959 Convair's contribution also will be larger, for the employer must match dollar for dollar the employee's contribution.

These funds are turned over to the federal government to administer and finance F.I.C.A (See **Convairiety**, Jan. 21, 1959 for a complete explanation of Social Security benefits.)

'Free' Benefits Cost Convair Each Year

(Where possible, exact figures for 1958 experience are given. Others are approximate.)

For Vacations:
$15 1/2 Million

For Holidays:
$12 Million

For Sick Leave:
$5,639,257.
("Direct" employees alone.)

For Rest Periods:
$9 1/4 Million

For Shift Bonus:
$4 1/2 Million

For Retirement:
$14,394,871.

For Insurance:
$5,206,398.
(This was the cost to Convair in 1958 for employee group insurance, over and beyond contributions of employees.)

Pilots Trained in How To Eject From Hustler

Simulated B-58 canopy ejections for Air Force crews will soon become a part of classroom training now that Convair Fort Worth engineers have completed another specially designed mobile training unit.

The new unit, officially tagged a pilot's ejection seat and canopy system, is the first of its kind to be used by the Air Force.

It looks like a section of the B-58 pilot's station, contains a seat that rises slowly about six inches during the make-believe ejection. As part of the familiarization, the canopy slowly moves back during operation, according to C. V. van Doren, design engineer of training aids.

The device's main task is to train pilots in the exact locations of two levers, one for each hand, which must be pulled to activate ejection.

Another of Convair Fort Worth's recently completed training units is the new B-58A fuel system trainer.

This, made up in three different panels, was mechanically and electrically designed with the help of Dept. 6-5's K. G. Bellesine and L. D. Messersmith respectively.

One panel depicts three-dimensionally, what happens inside the Hustler's fuel system, and one makes it possible to trace fuel flow through the aircraft on an electrically lighted board. The other panel helps to explain mid-air refueling.

According to R. K. Howard Jr., development liaison man working in the mobile training unit area, Convair Fort Worth has 21 units being prepared for the Air Force.

The units are being built by employees in Dept. 65, development manufacturing.

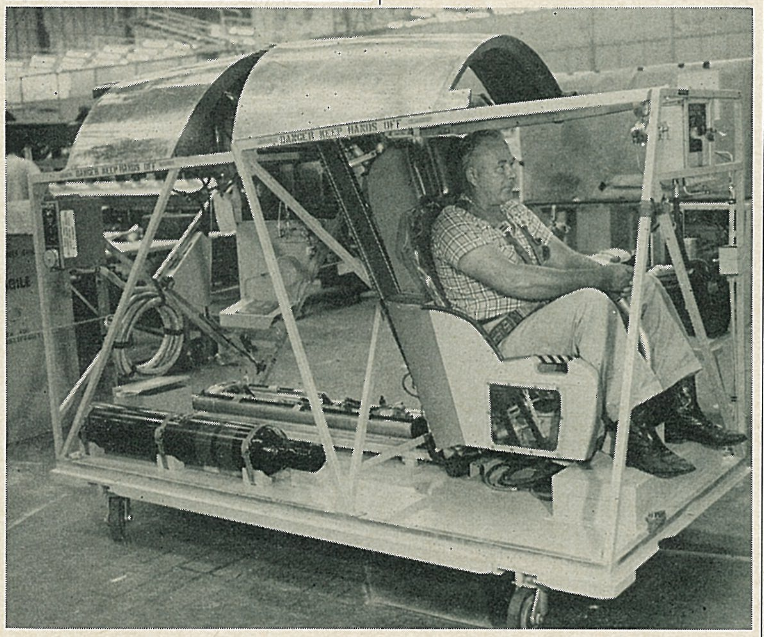
F-102 Unit Wins ADC 'A Award'

An F-102-equipped unit was designated one of the outstanding squadrons in the Air Defense Command last month.

The 482nd Fighter-Interceptor Squadron based at Seymour Johnson AFB, Goldsboro, N.C., received the ADC "A Award" for its record of "exceptional operational effectiveness."

Maj. Gen. E. H. Underhill, commander of the Eastern Air Defense Force, presented the award to Lt. Col. James M. Thomas, squadron commander, in a July 14 ceremony.

The award is given for actual performance under simulated combat conditions and day-to-day performance in training and maintenance. During the 12-month period, for which the award was presented, the 482nd FIS operated out of bases in Florida, Virginia, and North Carolina.



EJECTION UNIT—Convair Fort Worth's O. S. Knudson of Dept. 65 demonstrates how future Air Force B-58 crewmen will use mobile ejection and canopy unit as part of training program.

Five Big U.S. Air Firms Meet On F-108, B-70

First in a series of conferences with representatives of the five major U. S. aircraft companies involved in the design, development, and manufacture of F-108 Rapier and B-70 Valkyrie weapons systems for the Air Force convened at Convair San Diego last week (July 28-29).

Convair SD F-108 wing project staff hosted the group at the Plant 2 facility. Represented were the Los Angeles and Columbus, Ohio, divisions of North American Aviation, Inc., prime contractor; Chance Vought Co. of Dallas, Texas; Boeing Airplane Co., of Seattle, Wash.; Lockheed Aircraft Co., Marietta, Ga.; and Convair San Diego.

Future conferences are planned on a monthly basis to be held alternately at the home plant of each of the companies involved.

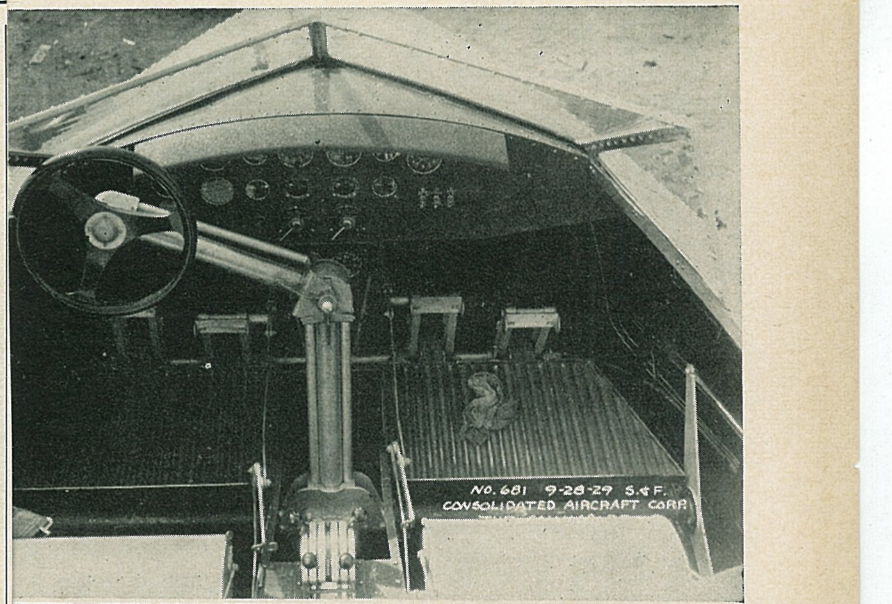
"This is the first time in history that five major aircraft companies have teamed up to develop these highly sophisticated weapon systems," said W. S. Stroud, who heads the F-108 wing program at Convair SD.

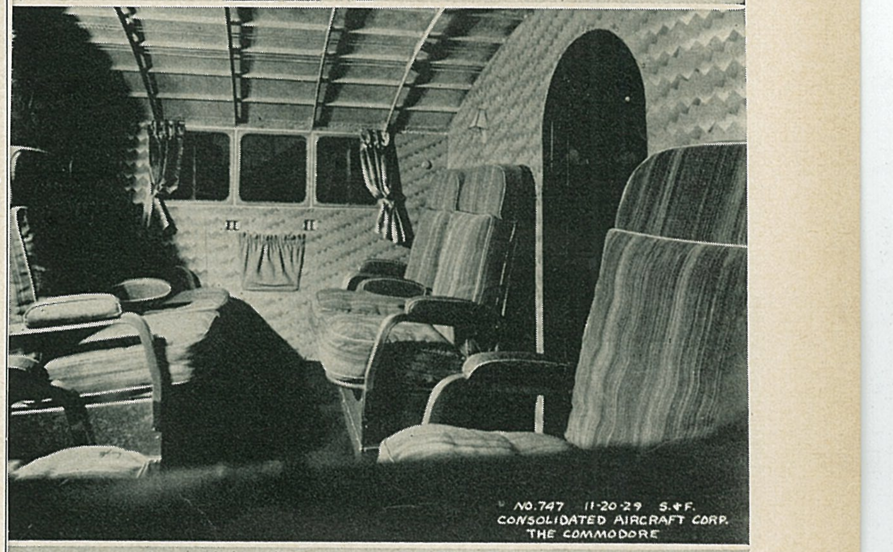
The conferences are designed to effect maximum interchange of information during development phase on a timely basis, he explained.

Fogel to Take Part In Panel Discussion

Lawrence J. Fogel, Convair SD research design engineer, will be on the program of the 1959 Western Electronic Show and Convention in San Francisco, Aug. 18-22.

Fogel, head of the reliability design group at Convair SD, will participate in a panel discussion on "The Role of Human Factors in Electronics" at an Aug. 20 session.







LUXURIOUS—Well, luxurious for 1929, anyhow. At top is Commodore's flight deck. Center is passenger compartment (there was room for 22 customers). Below, first flying boat is christened by Mrs. Herbert Hoover.

$15,000 Journey to Buenos Aires Paves Way for Start of Nyrba

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Domestic airlines had been offered strong overseas inducements in the Kelly Foreign Air Mail Act of 1928. The Post Office Department was authorized to pay contractors up to $2 a route mile. Pan American Airways, already in the field with a Florida-Cuba service, explored routes and acquired terminal rights deep into Latin America.

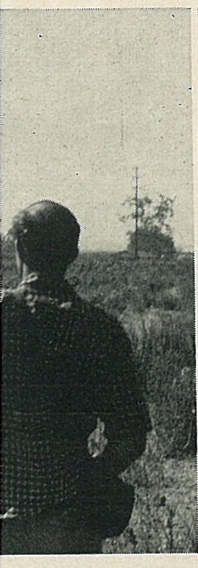
This was the background against which a new airline emerged early in 1929. The promoters were Reuben Fleet of Consolidated Aircraft; James H. Rand Jr. of Remington Rand; and Capt. Ralph O'Neill, a World War I flyer who had been aviation adviser to the Mexican Army in the mid-20s.

It was a speculative venture at first. Fleet and Rand put up about $15,000 to finance O'Neill on an exploratory trip through South America. The three were to share equally if the venture bore fruit. O'Neill's contribution was his knowledge of aviation and a fluent command of Spanish.

O'Neill found Pan American everywhere in control along the west coast, but in Buenos Aires he was able to obtain a remarkably favorable contract. This provided that all Argentine mail destined for North America would be carried by the new line at $10a pound, until the line was carrying one fourth of the total of such mail. Moving north to Rio de Janeiro, O'Neill negotiated a similar contract. Pan American soon offered to buy out the three partners for $250,000 each, according to Fleet, but they agreed to decline the offer.

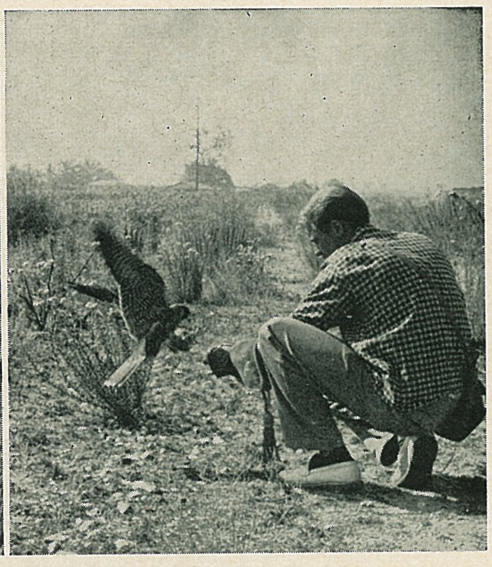
In April the line's name was announced—the New York, Rio and Buenos Aires (Nyrba for short) and an order for six 22-passenger flying boats was placed with Consolidated. Upon incorporation, O'Neill was elected president of Nyrba. Directors included Fleet, Rand, Frank C. Munson of the steamship line, and others. Through a public offering of stock the working capital was increased to $6,700,000.

At Buffalo, work was humming at what was called "Unit 2." This was housed in 68,000 feet of additional floor space in an adjacent area of the old Curtiss plant. The new flying boat, named the Commodore, was identical to the XPY-1 except for the hull, which was divided into luxuriously fitted passenger compartments. The first boat was launched in the Niagara River Sept. 29, 1929. It was flown to New York (where heavy fogs spoiled the effect of its flight past Manhattan) and thence to Washington, D.C. In ceremonies at the Naval Air Station Oct. 3 it was christened "Buenos Aires" by Mrs. Herbert Hoover, then the first lady. (As the nation was dry, she broke a bottle of non-alcoholic "champagne cider" across the boat's nose.)





) puts Kleinne trained falcon,



Kleinne returns on whistled signal to alight on owner's arm. Leather straps on legs, called "jesses," are used with leash to tether bird to perch.

'Miss Air Power' Now at Astro

Barring politicians, a Convair Astronautics girl may have set some sort of record for sustained public speaking on a single topic.

Joanne Alford, now of product support department, traveled over 31,000 miles within the United States giving lectures. As "Miss Air Power," a title bestowed upon



CHARMING—Joanne Alford of Astro, former Air Force Association "Miss Air Power," shown while on tour of 27 states. She holds private flying license, incidentally.

her by the Air Force Association, she addressed students in thousands of secondary schools in 27 states. She spoke on the advantages of following careers in science and engineering.

"My speaking schedules varied, but it wasn't unusual for me to give eight or nine one-hour talks during the day.

"I found the enthusiasm of the kids worth every minute of it," she recalls.

Joanne's selection for the job was not left to chance. She won the right from a field of 70 candidates representing all parts of the nation.

She was well qualified for the job.

At Purdue University, where she earned a degree in air transportation engineering, she had won honors in numerous flying contests.

In recognition of her charm, which she possesses in abundance, were titles of: Purdue's homecoming queen; dream girl of Pi Kappa Alpha; national sweetheart of Alpha Chi Rho; engineering queen; and a runner-up in a Korean Stars and Stripes newspaper to select "The girl I'd most like to come home to."

In March, 1959, Joanne joined Astronautics and is currently working as a research engineer on personnel requirements with product support.

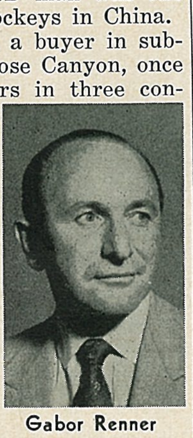
Is It News?
Call Convairiety

'Silent One'

SD Buyer Recalls Days When He Was Lead Jockey in China

Until his departure eight years ago a Convair SD man was one of the leading jockeys in China.

Gabor Renner, a buyer in subcontracting at Rose Canyon, once rode nine winners in three consecutive days, and on another occasion won three Shanghai Stakes races in a row.



Gabor Renner

He was a member of one of the most exclusive organizations in China—the Jockey Club. "However," Renner pointed out last week, "they are not jockeys in the sense we ordinarily think of jockeys. They do not race for any monetary reward and are best described by the term 'gentlemen riders.'"

Renner raced, for the most part, in Shanghai and Hong Kong. Daily attendance at these tracks averaged 20,000. Roughly two million Hong Kong dollars (six to one U.S. dollar on the exchange) passed through the parimutuels during a 50-day racing period.

Renner's racing career spanned 18 years in China. He was dubbed "Garbo" (the silent one) by the Hong Kong sports writers. During one five-year interval, Renner was particularly successful when he raced Night Express (of which he owned a share).

Renner, too, termed the horse his favorite. He said Night Express won $95,000 in stakes money.

Renner's China exploits came about in a rather remarkable fashion. Born in Budapest, Hungary, he spent two years in Shanghai when he reached age 13. He joined his father, Dr. Alexander Renner, who had established his medical practice there after escaping as a prisoner of the Russians during the first World War.

Renner returned to Europe where he finished his schooling. He received singular training on the continent as a career diplomat. (He still speaks his native Hungarian, also English, German and French, and can make himself understood in Chinese.)

Renner said his love of horses and equitation are easily traced back to his days in Vienna. There he was graduated with honors from the famous Viennese Military Academy, founded in 1746 by the Austrian Empress Maria Theresa, with special emphasis on turning out graduates skilled as career diplomats in addition to tutoring in the highest form of equitation.

Instructors at the Academy were connected with the Spanish School of Equitation in Vienna, home of the Lipizzaners, the world-famous breed of performing horses.

When Renner arrived again in Shanghai in 1933 he was employed by International Telephone and Telegraph in Shanghai and Hong Kong. After a number of years he was given the position of manager of material for the AT&T division. He pursued his avocation as a gentleman rider during these years.

In the United States for the last eight years, Renner has made an extensive study of horses and racing characteristics in this part of the country. He was recently awarded his license as a professional trainer.

With Convair SD for the past three years, his ambition is to someday select and train a thoroughbred according to his standards.

Renner feels that through patience and careful training he can get the best out of an animal. "Observation, though naturally important, isn't enough. One must get the 'feel' of the animal. I would do this by actually riding and working out the horse."

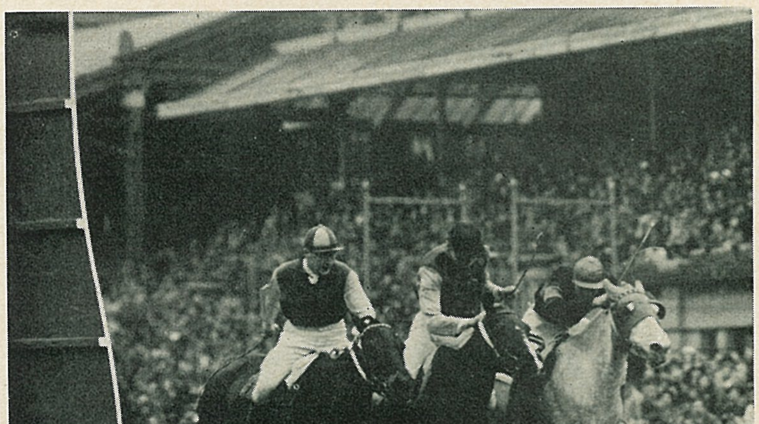


PHOTO FINISH—Gabor Renner, once one of leading jockeys in China, comes down to finish line in practical triple dead heat at Shanghai Race Track. Renner (on far right) finished second. Horses in photo are China ponies, which along with Australian Walers, are used almost exclusively in racing in China. They are smaller than thoroughbreds.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

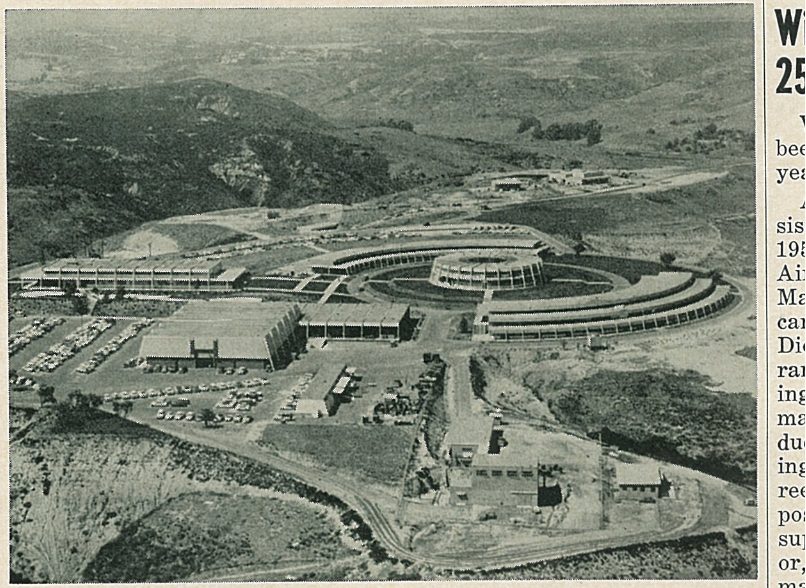
Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.



FROM THE AIR—This is General Atomic Division's John Jay Hopkins Laboratory for Pure and Applied Science, located at San Diego, Calif. Laboratory was dedicated this summer.

Merger of Material Service Based on Stock Exchange Plan

NEW YORK—Principal points of an agreement for the merger of Material Service Corporation of Chicago into General Dynamics Corporation were announced last month by the two parties.

Directors of General Dynamics and Material Service on June 25 unanimously approved the merger by which Material Service will become a division of General Dynamics. Frank Pace Jr., chairman of General Dynamics, and Henry Crown, chairman of Material Service, said that following completion of negotiations the merger proposal would be put before the share owners of both corporations for final approval.

As now contemplated, the agreement basically will call for General Dynamics to acquire the majority of the assets of Material Service in exchange for 2,064,516 shares of a new issue of General Dynamics no-par convertible preference stock on which cumulative dividends at the rate of 5 per cent per annum (approximately $2.90 per share) will begin in 1964.

Under the agreement the preference stock would have a liquidating value of $58.125 a share. Each share would be convertible into .89423 shares of General Dynamics common, or a total of 1,846,152 shares of common. This would give the common an effective conversion price of $65 a share.

The new preference stock will become convertible as follows: 15 per cent in each of the years 1961, 1962 and 1963; 20 per cent in 1964; 20 per cent in 1965, and 15 per cent in 1966. The conversion privilege will expire in 1974.

The agreement calls for holders of the preference stock to elect a maximum of three members to the General Dynamics Board of Directors.

Henry Crown will become one of the three new directors and he will also become chairman of the Material Service Division. The present management policies and personnel of Material Service will be continued and members of the Crown family will remain identified with the business. The profit-sharing plan of Material Service will continue in effect.

Officials of the two corporations pointed out that changes in some details of the merger agreement as it now stands may be necessary, but added that the philosophy and basic principles of the transaction, as outlined, will not be altered.

Material Service, one of the nation's largest producers of building materials, concrete products and coal, had earning after taxes in 1958 of more than $10 million from the assets to be acquired by General Dynamics Corporation.

Stromberg-Carlson Names Planning Mgr.

SAN DIEGO—Franklyn E. Dailey Jr., has been appointed manager of planning for Stromberg-Carlson, San Diego.

Dailey graduated from the United States Naval Academy in 1942 and won his wings at Pensacola in 1945. He continued his education at various special service schools and was awarded a master of science degree in Applied Physics by the University of California.



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Vieweg Transferred To Washington Post

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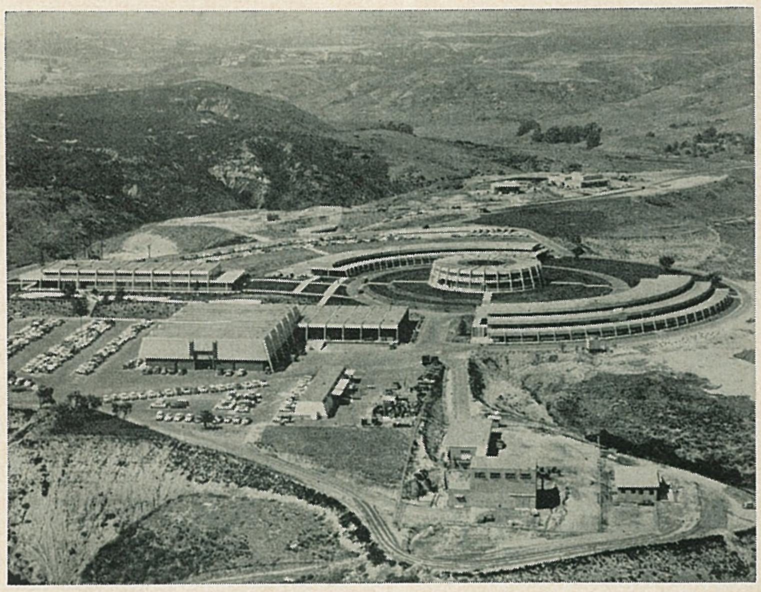
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Governor for a Day Appoints Jerry Ray

Title of honorary Texas Colonel has been bestowed upon Convair Fort Worth's J. V. "Jerry" Ray in Dept. 6-2.

Ray, a weights group engineer, received the honorary commission when his friend, Senator Jarrard Secrest, took over as governor one day in absence of Gov. Price Daniels.

Senator Secrest sent Ray a 9 x 11 graduation-type diploma notifying him of the appointment. He said it had the official Texas seal, too.

Willard Luppke, 46, With Convair Over 25 Years, Dies at SD

Willard Luppke, 46, who had been with Convair SD over 25 years, died suddenly July 25.

A manufacturing control assistant foreman at Plant 2 since 1954, Luppke joined Consolidated Aircraft in Buffalo, N. Y., in March, 1934, as a stock clerk. He came with the company to San Diego in 1935 and served in a range of departments, dispatching, production, purchasing, tool manufacturing and control, production control, and manufacturing control during his long career with Convair. He had held positions as assistant tooling supervisor, tool control supervisor, and production control foreman.

He was also active in CRA bowling circles and a member of the Convair SD Management Club.

Survivors include his wife, Marie; a son, David; his parents; and a sister, all of La Mesa.

Students Will Hear SD Tooling Experts

Members of the junior chapter of American Society of Tool Engineers will hear two Convair SD tooling experts speak at the Aug. 14 meeting.

C. E. Plummer and W. L. Carr, both senior manufacturing development engineers at Plant 2, will be on the program. Plummer's topic will be "High Temperature Alloys," while Carr will talk on "Sub-Zero Machining."

Members, all students still in training, will meet at 7:30 p.m. in the conference room of the I.A.M. Lodge, 3911 Pacific Highway.

Convair Scientists To Teach Courses

Two Convair scientists will teach courses this fall in the San Diego State College Campus Evening Program.

Walter S. Bradfield and Ching H. Yang, both of Convair scientific research laboratory, will be instructing in the graduate program in mechanical engineering. Bradfield will teach a course in thermodynamics and Yang, one in dynamics of machinery.

Graduate students must register by Sept. 11. Admission information may be obtained by calling JU-2-4411, ext. 271.

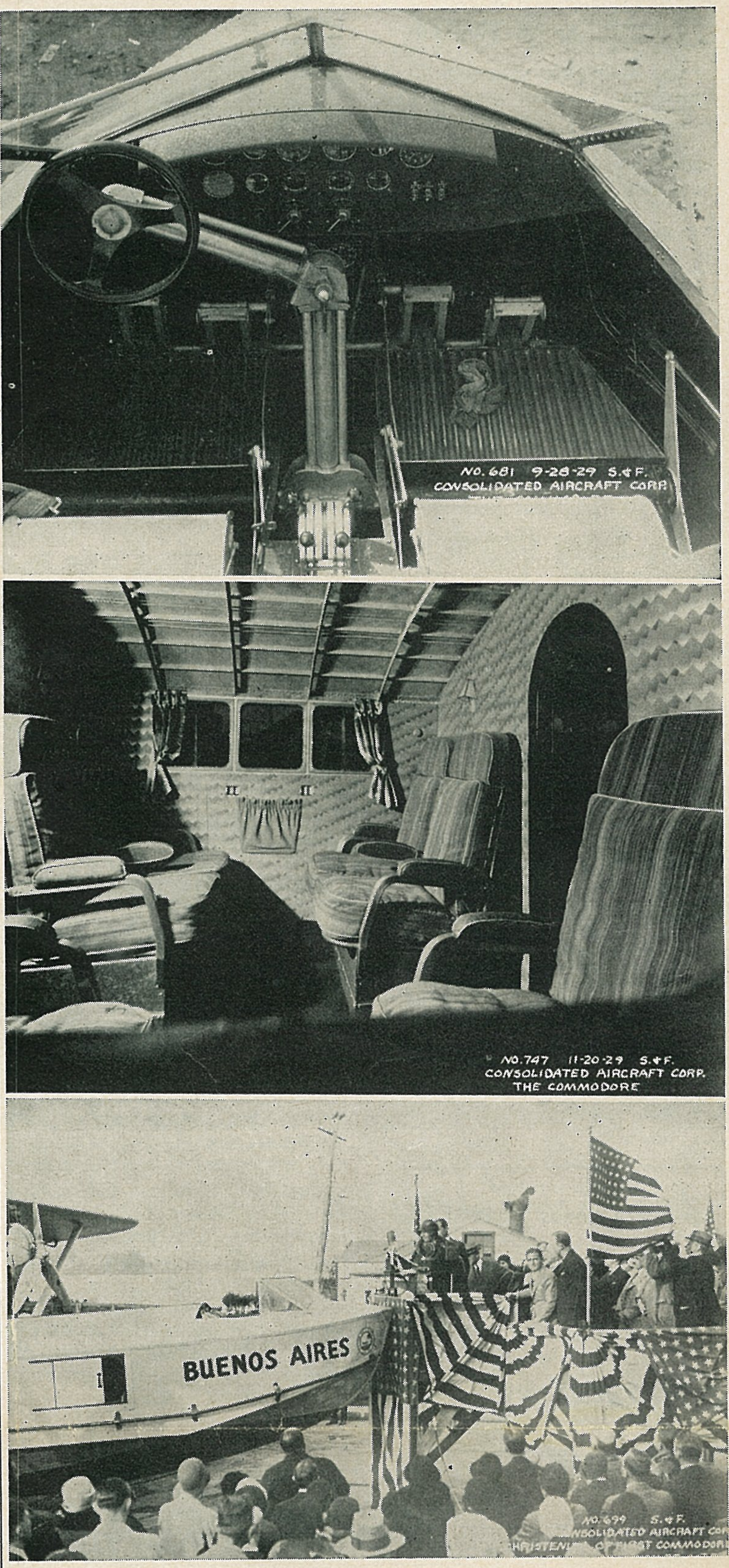
Convair Son Wins Fleet Scholarship

The Fleet Foundation, established 18 years ago by Maj. Reuben Fleet, founder of Consolidated Aircraft, last month awarded a scholarship to a Convair son.

Leavitt Lee Thurlow, son of L. W. Thurlow (Dept. 15-3) was selected by the Foundation as one of the scholarship winners for 1959. He will attend the University of Southern California in the fall.

SEMINAR CHAIRMAN

ROCHESTER — George A. Peck, vice president and general manager of Electronics Division of Stromberg-Carlson, chairmanned an American Management Association seminar at Colgate University last week.



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CRA Discount Tickets

The following discount tickets and items are available at Plant 1 and Plant 2 employee services:

BASEBALL — Padres discount tickets for Aug. 19 game available two days before game. Tickets for Colt League Baseball Championships (Aug. 6-9) available now.

MARINELAND — Discount tickets, adults $1.75; children, 7 to 17 years, 50 cents.

PLANE PICTURES — Colored prints of F-102, R3Y, T-29, 440 available at 25 cents a set.

STAR-LIGHT OPERA — Reduced-price tickets on sale Aug. 10, 9 a.m., for "Naughty Marietta."

Early Entry Urged For Fall Bowling

Over 1,000 bowlers in 20 leagues are expected to register for fall and winter bowling sponsored by the CRA, Jim Hayman, commissioner, revealed last week.

Registrations are now being taken for the winter leagues and early entries are urged in order that league committees can finalize plans.

In addition to the list of leagues announced in the July 22 issue of Convairiety there will also be a Trio League scheduled to roll Tuesdays from 4:30 to 6 p.m. at Pacific Recreation. Entries should be placed with George Burham, ext. 2687, Plant 1.

Additional bowling information can be obtained by contacting Jim Hayman, ext. 1155, Plant 1; or Mike Brooks, ext. 720, Plant 2.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period August 1 through August 15.

Twenty-year: Dept. 3-5, Norma C. Buell; Dept. 21-2, J. W. Hopkins; Dept. 31, C. P. McVay, Dept. 271, Everett Oliver; Dept. 280, W. J. Gibson; Dept. 406, H. S. Jensen; Dept. 600-1, F. D. Slavens.

Fifteen-year: Dept. 25-2, Francis Hayden; Dept. 31, J. D. Jackson; Dept. 44-2, Irene C. Weir; Dept. 142, J. W. Hartsfield; Dept. 200, Mildred P. Elie; Dept. 218, J. F. Mayer; Dept. 288-5, H. A. Howell; Dept. 600, J. E. Miller, C. J. Oswald, L. O. Wood.

Ten-year: Dept. 3-7, Nan S. Hillard; Dept. 31, G. E. Heslop, Joe Nunez, G. K. Phares, F. P. White; Dept. 44-3, E. F. Schaller; Dept. 97-6, Victor Van Saanen; Dept. 98-6, Alice M. McHugh.

Dept. 133, J. L. Pittsford; Dept. 149, Mary R. Riley; Dept. 180, Mae L. Sinks, S. F. Smith; Dept. 188, Juan Meza, W. L. Ryan; Dept. 205, Mary L. Keeling.

Dept. 216, Norma B. Grant; Dept. 218, Laura Williamson; Dept. 223, L. D. Camilla; Dept. 230, Elizabeth Baker, C. H. Leonard; Dept. 231, Ruby Y. Buck; Dept. 233, Christine F. Brown; Dept. 266, Carmen G. Gonzales; Dept. 279, J. C. Elam; Dept. 400-1, J. F. Crawford; Dept. 401, A. C. Johnson.

Promotions

SAN DIEGO

Promotions to or within supervision effective July 20.

Dept. 6-51, Engineering: To loft group engineer, J. J. Arnieri. To structural group engineer, J. Hughes, W. H. Schaefer.

Dept. 31, Experimental: To asst. foreman, J. M. McClendon.

Dept. 129, Plastics Production: To asst. foreman, G. C. Hirst.

Dept. 148, 880 Major Mate: To asst. foreman, C. B. Harper Jr.

Dept. 266, Model 8 Fuselage Primary: To asst. foreman, E. D. Brannon, W. E. Carriker.

Dept. 267, Model 8 Final Assembly: To foreman, F. M. Applegate.

Dept. 271, Model Field Operations: To asst. foreman, J. H. Markey.

Dept. 280, Proofing Mock-up: To asst. foreman, D. E. Allman, W. E. Smith Jr.

Personals

SAN DIEGO

I wish to express my grateful thanks to all Convair employees at Plant 1, day and night shifts, for the expressions of sympathy and beautiful floral tributes.

Mrs. "Pappy" Ratcliffe

Retirements

SAN DIEGO

BODENHAGEN — Theodore A., Dept. 25. Seniority date July 13, 1936, retirement effective July 24, 1959.

GREEN—Wayne K., Dept. 44. Seniority date April 5, 1951, retirement effective July 24, 1959.

Births

SAN DIEGO

BLODGETT—Son, Joseph Earle, 8 lbs., born July 21 to Mr. and Mrs. W. R. Blodgett, Dept. 600.

MORALEZ—Daughter, Lisa Ann, 8 lbs., 5½ oz., born July 6 to Mr. and Mrs. Clio Moralez, Dept. 603.

Deaths

SAN DIEGO

CHAPLIN—L., Dept. 149. Died July 16.

LUPPKE—Willard., Dept. 292. Died July 25. Survived by wife, Marie E. Luppke; son, David C. Luppke; parents, Mr. and Mrs. William F. Luppke; sister, Mrs. Ruth Murison.





COST CUTTING—First Economy Run sponsored by Convair SD Sports Car Club attracted entry field of 63 cars. Top photo shows driver being briefed at starting point. Below are members of Economy Run committee headed up by Peter Aperlo (second from left).

SD Man Wins Economy Run

Contestants in the first "RX" Economy Run sponsored by the Convair SD Sports Car Club July 19 toted up some miles-per-gallon statistics that make the price of gas an almost negligible expense.

John W. Stevenson (Dept. 25-7) out-mileaged 62 entries when he drove his Renault Dauphine across the finish line after averaging 49.644 miles - per - gallon. Stevenson was awarded the Economy Run's sweepstakes trophy for compiling the best average over the 300-mile course.

Other Convair participants placed well up in the standings, Peter Aperlo, rally master, reported. Three local contestants won class championships.

Bill Rector of the Astro Sports Car Club placed first in Class Three, averaging 49.4 mpg in an Alfa Romeo. Albert Wiest (Dept. 6) drove a Karman Ghia Volkswagen into first place in Class Four with an average of 47.124.

H. E. "Gene" Pasek (Dept. 3-3), participating in his first Sports Car Club event, nailed down first place in Class Eight when he averaged 31.459 mpg in a Jaguar.

Al Armstrong of the SD club placed third in Class Two, driving his Sprite at an average of 45.508 mpg. Another club member, Barrie Freeman, placed third in Class Five. He drove his Porsche at 44.413 mpg.

Two other Convair SD men, John Zenari and Richard Ambriz, drove Volvos into second and third place in Class Six. Zenari averaged 36.203 mpg; Ambriz, 35.468.

Don Chamberlain, driving his Chamberlain Special, averaged 28.131 mpg, good for third place honors in Class Seven.

'Marietta' Tickets Go on Sale Monday

CRA reduced-price tickets for the next Star-Light Opera performance, "Naughty Marietta," will be on sale next Monday (Aug. 10) at 9 a.m. at Convair SD employee services, Plants 1 and 2.

Tickets for Convair night, scheduled for Aug. 23, will be $2.10 for $3 seats, and $1.75 for $2.50 seats.

Commercial Ground Class Starts; Link Trainer Now in Operation

Operations of the CRA Solo Flyers at Convair SD are rapidly expanding with the announcements this week that the commercial ground school course is now in session and that the Link Trainer is ready for use.

These services are in addition to the ground school course, taught by Rex Robinson, that prepares students for their private pilot's FAA written examinations.

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The first ground school course at Convair SD that enables students to get their license for commercial flying is now being held on a twice-a-week schedule by the CRA Solo Flyers.

Response to the first announcement was sufficient to get the class under way, B. A. Shields, instructor, said last week. Many have already signed up for the new series of classes that will start on October 20, he added.

However, a few openings still remain in the class now being held. Students who wish to sign up for it can do so and take that portion which they have missed when the course starts again in October.

Classes are held every Tuesday and Thursday, between 7-9 p.m., at Jim's Air Service, Lindbergh Field. The 50-hour course lasts 10 weeks.

Cost of the course is roughly 50¢ an hour or a total of $25, considerably below what the course would cost without CRA sponsorship. Any person that fails a segment of the commercial test can retake that part of the course free of charge.

Requisites for students are either a private pilot's license or completion of the Solo Flyers ground school course. Reservations can be made and additional information obtained by contacting Shields, ext. 2783, Plant 1.

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Ken Condra (Dept. 15), an experienced Navy and airline pilot, has been appointed as instructor on the Link Trainer, which has been set up by the CRA directly adjacent to the Solo Flyers classroom at Jim's Air Service.

All Convair SD flying enthusiasts, who have already received their private pilot's license, are eligible to use the Link to get their instrument ratings.

A charge of $5 will be made for one-hour lessons. For reservations and additional information contact Condra, ext. 2770, Plant 1.

Halfacre Winner In Pistol Shoot

Jim Halfacre (Dept. 180) snapped out of a stubborn shooting slump at the July 26 Pistol Club matches to narrowly defeat B. L. Broadway (Dept. 603) for first place in the master class.

Although both Halfacre and Broadway actually tied with 293 points, Halfacre pumped six bullets into the "X" ring while Broadway landed five in the tie-breaking circle.

In the expert class, Carl Hornburg (Dept. 166) placed first with 277 points followed by W. G. Walker (Dept. 6) with 273. Harvey Ingalls (Dept. 6) and R. G. Lair (Dept. 406) ranked first and second, respectively, in the sharpshooter class.

Placing one-two-three in the short national match event were Broadway, Joe Williamson (Dept. 401) and Walker.

New Hunter Safety Class Starts Sat.

The last hunter safety course before the opening of dove season in September will start this Saturday (Aug. 8) at 9 a.m. at the CRA Gun Club facility at Gillespie Field.

Registration can be made at employee services, Plants 1 and 2, or by just showing up for the first class this Saturday.

Spinfishing Club Invites SD Folk

The San Diego Spinfishing Club has extended an invitation to members of the CRA Fishing Club and other Convair SD fishing enthusiasts to take part in its affairs.

Additional information can be obtained by calling Dale Cromartie, ext. 1650, Plant 1.



INSTALLED—New officers of Convair Golf Club were installed recently at quarterly meeting at Admiral Kidd Officers' Club. They will set up golf activities for both SD and Astro people. From left (standing): F. W. Kelly (SD), outgoing vice president; J. J. Swarts (SD), outgoing treasurer. From left (sitting): H. V. Purnell (Astro), re-elected president for second year; G. L. Dix (SD), incoming vice president; C. W. Maxfield (SD), incoming treasurer; and J. Kenney (Astro), incoming second vice president.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY—Monthly shoot at 9 a.m. Aug. 9, Kearny Mesa Range. Meeting at 7:30 p.m., Aug. 20, Bldg. 2 reception center, Astronautics.

BADMINTON—Open play for families 7:30 p.m. Tuesday evenings in Federal Bldg., Balboa Park.

BOWLING—Reservations open now for fall and winter leagues. Contact Jim Hayman, ext. 1155, Plant 1; or Mike Brooks, ext. 720, Plant 2.

CAMERA CLUB — Meeting at 7:30 p.m., Aug. 10, in Photo Arts Bldg., Balboa Park.

COIN CLUB — Picnic starting at 9:30 a.m. Sunday (Aug. 16) at Pecan Park.

DELTA DIVERS — Overnight trip to Santo Tomas, Mexico, Aug. 8-9. Contact Allen Jones, ext. 2909, Plant 1.

FISHING CLUB—Boats needed for Junior Fishing Derby. Contact Dale Cromartie, ext. 1650, Plant 1.

GARDEN CLUB—Meeting tonight (Aug. 5) at 7:30 p.m., home of Walter Low, 3363 Felton St. Summer Show Aug. 9, 1-6 p.m., Floral Assoc. Bldg., Balboa Park.

GOLF—Reservations now open for Golf Club Partner's Best Ball tourney Aug. 22-23 at Torrey Pines. Call Alma, ext. 218, Plant 2; or H. V. Purnell, ext. 1313, Astro.

GUN CLUB — Hunter safety course starts Saturday (Aug. 8) at 9 a.m. at Gillespie Field.

JEEP CLUB — Next meeting Aug. 19, Civil Defense Bldg., Gillespie Field.

JUDO—Workouts and instruction every Thursday at 7 p.m. in CRA Clubhouse on Pacific Hwy.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Aug. 11—"The Man Who Knew Too Much," and "Man in the Shadow." Aug. 18—"Northwest Mounted Police," and "Wings of Eagles." Admission: adults, 25¢; children, 15¢.

RADIO CLUB — Meeting at 7:30 p.m. tomorrow (Aug. 6) at Harbor Drive Headquarters.

ROLLER SKATING — Skate night Monday (Aug. 17) at Skateland, Front and G Sts., 6:30-9 p.m. Free tickets at employee services, both plants, and from departmental representatives.

SOLO FLYERS — Commercial ground school course Tuesdays and Thursdays, 7-9:30 p.m., Jim's Air Service, Lindbergh Field. Link Trainer Instruction now available. Contact Ken Condra, ext. 2770, Plant 1.

SPANISH CLASS — Organizational meeting tomorrow (Aug. 6) at 7:30 p.m. in Television Room of CRA Clubhouse on Pacific Hwy.

SPORTS CAR CLUB — Meeting tonight (Aug. 5) at 7:30 p.m. in Museum of Natural History, Balboa Park. Council championship event, "Field Day '59," starts 8 a.m. Aug. 9 at Astro parking lot.

WATER SKIING — Free instruction for beginners on first weekend. Skiing each Saturday and Sunday, Tierra del Fuego, Mission Bay.





AWARDS NIGHT—Flight winners and runners-up (on left) received trophies at July 9 awards banquet staged by Convair Golf Club. In photo at right are: J. A. Batson (Astro), first flight runner-up; Lee Stone (Astro), top woman; Ralph Long (SD), champ runner-up; Al Reiter (SD), championship winner; Marian Wierzbicki (SD), runner-up; and Russ Davis (SD), first flight winner.

Boats Needed For Children During Derby

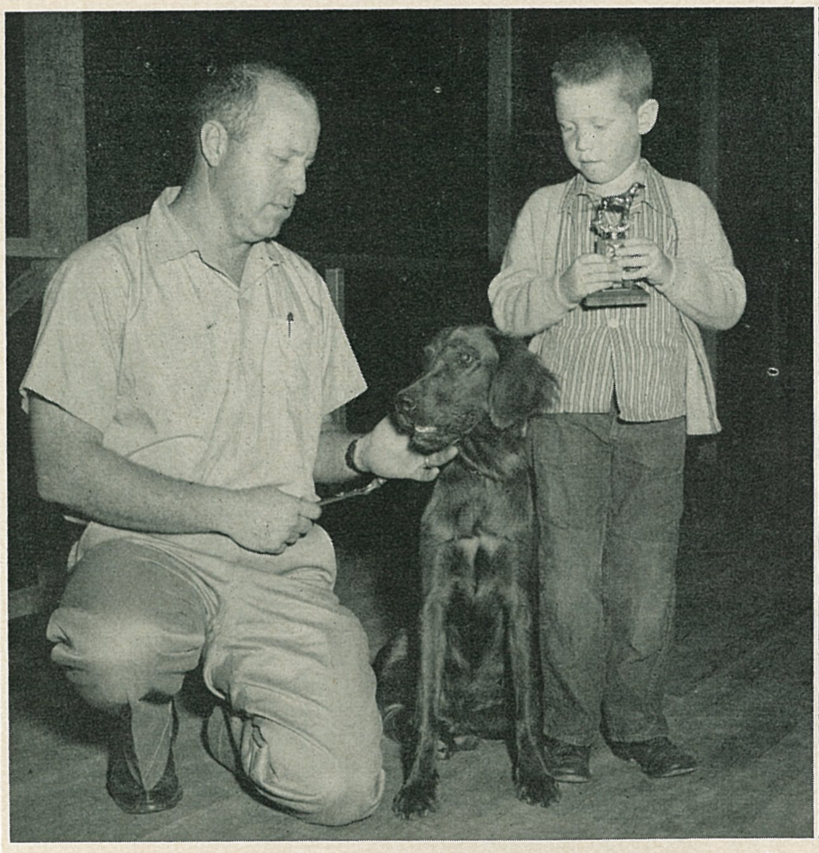
If you own a boat you'll be able to brighten the lives of underprivileged youngsters during the Junior Fishing Derby the latter part of August.

The CRA Fishing Club will again participate in the Derby and is canvassing the plant population for boat owners willing to treat the children to an all-day outing.

The affair is sponsored annually by the Pacific Beach Town Council and selects boys and girls, between 9 and 15, from the San Diego Children's Association, Boys' and Girls' Clubs of the San Diego area; Nazareth Home, Neighborhood House and others.

Boat owners are expected to furnish bait, tackle and lunch, if possible, for their young guests. Anyone who owns a boat at Convair SD is urged to call Dale Cromartie, ext. 1650, Plant 1 as soon as possible.

A definite date for the Derby is still to be selected but it will be held the latter part of August.





TOPS—Dog lovers from Convair SD and Astro were in attendance recently when CRA Gun Club sponsored dog show and obedience demonstration in conjunction with monthly meeting. At left is eight-month-old "Kelly," winner of best male trophy, with owners Jack Rogers (SD Dept. 6) and son, Marck, 5. On right is "Friday," best female, with owner Manford Davis (Dept. 401).

Spanish Class Meeting Set For Tomorrow

An avalanche of response to the recent offer of CRA at San Diego to sponsor a course in conversational Spanish has prompted an organizational meeting tomorrow (Aug. 6).

It will be held at 7:30 p.m. in the Television Room of the CRA Clubhouse on Pacific Hwy. near Overpass Two. All prospective students are requested to attend the meeting.

Most likely two classes will be organized, one for those who have some familiarity with the language and another for those starting out fresh. No fee will be charged for the course, expense of which is being underwritten by the CRA.

Classes will be conducted by Jim Hardison (Dept. 15-1), a fluent Spanish linguist. Purpose of the course is to give students a "working" knowledge of the language.

Coin Clubbers Set Pecan Park Picnic

Convair SD's Coin Club will combine a family picnic and coin auction starting at 9:30 a.m. on Sunday (August 16) at Pecan Park.

The picnic will be an all-day affair and members are asked to bring their own food baskets. Coffee and punch will be furnished by the club.

Members of the second shift are especially invited to attend and take advantage of the coin-swapping session during the afternoon.

CRA *Sports & Recreation* Convairiety

'A' Team Tips Eagles 1-0 To Snag Softball Crown

The Convair "A" team, although outhit, stopped the Convair Eagles 1-0 last week to all but cinch the softball championship of the San Diego AAA League.

The victory extended the "A" team winning streak to 17 straight, leaving its record marred only by a first-game loss. For the Eagles the loss was their third, setting their won-lost record at 15 and 3.

The loss was a tough one for the Eagles, especially pitcher Bob Miller, who gave up at most two hits. (Some confusion exists as to whether the infield grounder that drove in the winning run for the "A" team should be classified as a hit or error.)

The run scored in the third inning. John Hartsell singled, then stole second. Bill Doten then clipped an infield grounder past pitcher Miller who deflected the ball. Before infielder Tommy Martinez could make the play Hartsell went in to score.

During the game, the Eagles smacked "A" team pitcher Art Bunge for six hits. But they left nine runners stranded—including a bases loaded, no-out situation in the second inning.

Two or three make-up games are still to be played by both teams. However, there is slight chance that they would change the standings of the Convair teams, according to Gil Crosthwaite, commissioner.

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Biggest upset of the shop league softball season at Convair SD occurred last week when the previously unbeaten leaders of the National League, Flite Test, were clipped for the first time 4-1 by 880 Fuselage.

The loss pushed them into a first-place tie for the second round with Mockup, both teams having won three and lost one.

Experimental is leading the second round in the American League with a record of 3 and 0, followed by Dept. 400.

16 Win Prizes In Blind Bogey

Next event to be staged by the Convair Golf Club is a Partner's Best Ball tourney Aug. 22-23 at Torrey Pines.

Reservations are being taken now by Alma, ext. 218, Plant 2; and H. V. Purnell, ext. 1313, Astro.

Results of the blind bogey at the July 25-26 sweeps at Circle R saw 16 golfers win prizes. They are: W. W. Pierce (Dept. 300 Astro); E. A. Perryman (Dept. 343 Astro); W. J. Flannigan (Dept. 343 Astro); T. F. McCubbin (Dept. 183 Astro); R. A. McClernan (Dept. 182 Astro); R. L. Lang (Dept. 288 SD); Andy Corrao (Dept. 271 Astro); E. E. McKenzie (Dept. 600 SD);

And F. R. Gaughen (Dept. 325-0 Astro); K. R. Chambers (Dept. 230 SD); H. C. Van Buren (Dept. 292-1 SD); H. M. Smith (Dept. 181 Astro); Mrs. Erma Purnell (wife of H. V. Purnell, Astro); J. W. Weaver (Dept. 551 Astro); Ed Kerfield (Dept. 31 SD); and T. C. Craighead (Dept. 232 SD).

Low gross honors were taken by Morrie Baxter (Dept. 211 Astro) with a 73, followed by Ron Hindrichs (Dept. 14 SD) with 75 and W. A. Baxter (Dept. 545-7 Astro) 76.

COLT LEAGUE TICKETS

CRA at Convair SD is handling tickets for the western regional tournament of the Colt League Baseball Championships which start tomorrow (Aug. 6) at Westgate Park.



SHUFFLED—Over 90 second shifters in Bldg. 3 at Convair SD participated in recent shuffleboard tourney. J. M. May (center), CRA representative from Dept. 188, presented trophies to winners (from left): A. Arellano and R. R. Lyman (both Dept. 148), the winning doubles team; L. Cupp (Dept. 188), singles winner; and C. T. Hatfield (Dept. 160), runner-up.

Dahlia Exhibition to Highlight Garden Club's Show This Sunday

The spotlight will be on dahlias this Sunday (Aug. 9) when the Convair SD Garden Club stages its annual Summer Show in the Floral Association Bldg. in Balboa Park.

Thirty-two classes in four categories have been set up for the dahlia exhibition, said E. L. Zimmerman, commissioner.

The same show last year attracted 1,500 spectators and 500 entries in the dahlia exhibition alone. Doors of the Balboa Park Bldg. will be thrown open this year to the public between 1 and 6 p.m. Entries will be taken between 7:30 and 11 a.m.

As in the past, Zimmerman added, all specimens entered must have been grown by the exhibitor.

Entry lists for the show can be obtained at employee services locations at both Plants 1 and 2. For more information contact either Zimmerman, ext. 2594, Plant 1; or Ann Freedman, CO-4-7813.

Zimmerman reminded members that a meeting of the Garden Club will be held tonight (Aug. 5) at 7:30 p.m. in the home of Walter Low, 3363 Felton St.

Radio Club Plans List of All Hams

Members of the CRA Radio Club at Convair SD starting this week are undertaking the task of compiling a directory of all licensed (both past and present) ham operators at Convair SD.

J. B. Baker, commissioner, urged all operators to cooperate with the effort and personally submit information required (including call letter, address, plant dept., etc.) To register contact employee services, ext. 1245, Plant 1.

Baker said the purpose of the project is to benefit all SD radio amateurs and that the club hopes to list all hams at Convair SD (whether club members or not) in the directory.

Regular Shoot Set By Archers Aug. 9

The picnic and late afternoon shoot formerly scheduled by the Convair SD Archery Club for Aug. 9 has been cancelled but the group will stage the monthly shoot on the same date.

It will be held as usual on the Kearny Mesa Range starting at 9 a.m. Vacation conflicts have caused the change in the previously announced plans. The club hopes to reschedule the picnic and late afternoon shoot in September.

Delta Divers Plan Jaunt Into Mexico

A trip to Santo Tomas in Mexico has been arranged for Convair SD's Delta Divers the weekend of Aug. 8-9, Tom Richardson, commissioner, reported.

The group will meet at Oscar's Restaurant near the border between 7 and 8 Saturday morning. They will spend the night in Santo Tomas, returning the following day.

SD Car Club Council Meet This Sunday

"Field Day '59," the annual council championship event of the Convair SD Sports Car Club, will be held this Sunday (Aug. 9) starting at 8 a.m. at the Astro parking lot.

Drivers will have their choice of entering three of four events. Included are time trials and acceleration and braking tests at Hourglass Field and slalom and gymkhana at the Astro parking lot.

Both the slalom and gymkhana will be short events (approximately three minutes each). The time trials will consist of two practice runs, a warm-up lap and final timed lap. Acceleration and braking will be run over a 1/10 mile straightaway and timed with electronic measuring devices.

Trophies will be awarded for first through tenth overall and dash plaques for 11th through 15th. A trophy will also be presented for best novice and best tyro. Best of make awards will be given those in the top 15.

Overall positions will be determined by awarding points for each of the three events. First place will receive 25 points, second 24, and so on down to the last car.

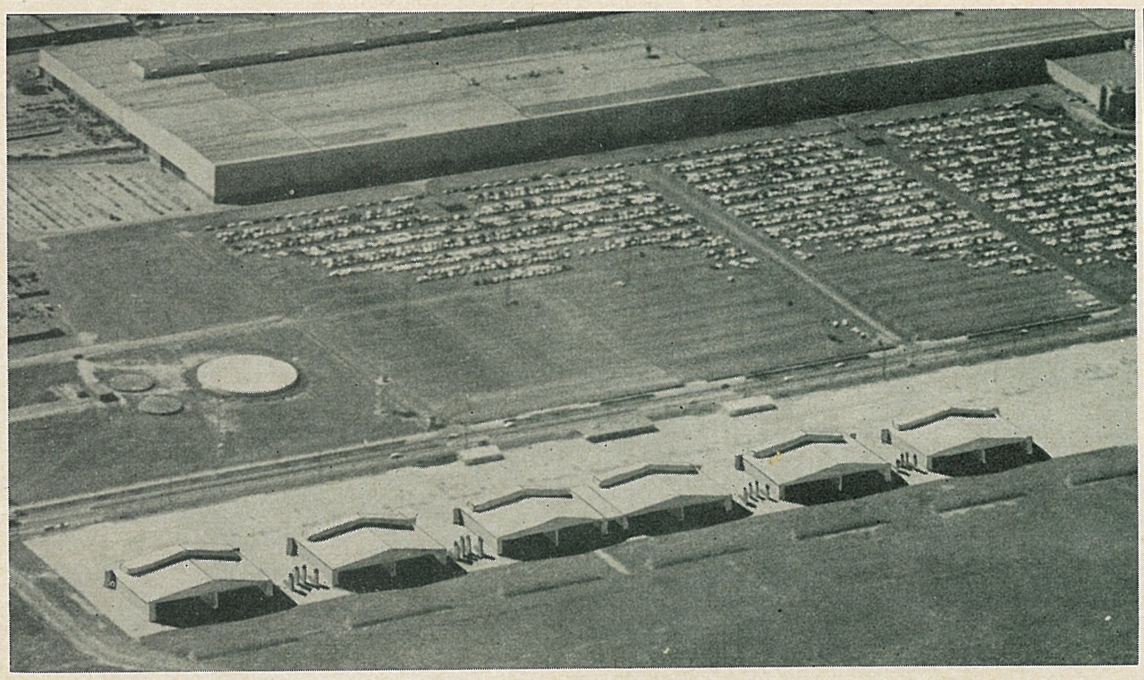
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Next meeting of the Sports Car Club will be held tonight (Aug. 5) starting at 7:30 p.m. in the Museum of Natural History, Balboa Park.

Golf Championships Set for Saturdays

Convair SD's 54-hole championship golf tourney will be staged Sept. 12, 19 and 26 at Flying Hills, Ken Wulfemeyer, commissioner, reminded last week.

Golfers should note the Saturday dates for the CRA tourney. They replace the Sunday dates previously announced, Wulfemeyer said. Entries will be taken, starting Aug. 19, at ext. 1705, Plant 1. They will close on Sept. 2.



AERIAL "FUTURE"—Fred Sloan of Convair FW industrial facilities used aerial photo of Fort Worth plant—and paintbrush—to produce preview of new B-58 production field operations stations now being built along Grant's Lane.

Drivers Under Age 25 Most Accident Prone

A four-week "off-the-job" accident injury survey (Convairiety, July 22, 1959) among Convair San Diego Division employees indicated that autos were involved in about one-fourth of the accidents, but this category outranked all others in severity.



M. C. Val Dez

"Nationally, in 1958 there were 36,700 deaths involving autos, and 2,825,000 injuries," M. C. Val Dez, SD Division chief safety engineer, reported.

"In all fatal accidents, exceeding the speed limit was the greatest single cause, accounting for 43 per cent. On the wrong side of the road was the next in rank, at 16 per cent, and failure to observe right-of-way followed at 13 per cent."

During last year, drivers under age 25 were involved in, if not actually responsible for, 27 per cent of the fatal accidents and more than 20 per cent of the non-fatal accidents. Drivers in this age bracket constitute no more than 14 per cent of all licensed drivers, Val Dez pointed out.

"In 1959 an estimated 900,000 young men and women will become of driving age. Some of these, of course, will be Convair sons and daughters. Convair parents can do nothing more important to safeguard their children's safety than to insist that the youthful drivers know all the finer points of safe driving and to drum, drum, drum on their importance."

* * *

Question: You are driving down a highway at night. The bright lights of the oncoming car blind you. Do you (a) counteract the effect of the other car's brights by flicking on yours? or (b) speed up so you can get past the other car more quickly? or (c) slow down and keep your eyes on the right edge of the road?

If you picked "c" you are hep to the safer points of driving, according to the National Safety Council.

Question: If the wheels of your car go off the right side of the road and onto a soft shoulder, you should (a) jerk the wheel to the left before the tires have a chance to sink down? (b) hit the brakes to stop the car quickly? (c) take your foot off the gas pedal and wait till your car slows down before returning to the highway? Answer (c). Keep a firm grip on the steering wheel and your foot off the brake and accelerator until your car slows down. Then—not before—turn the wheel sharply toward the pavement.

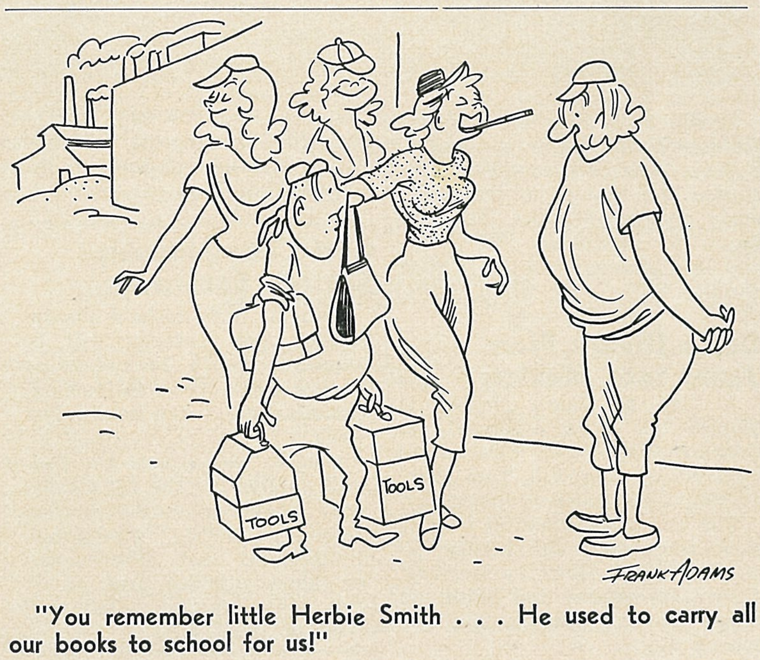
Question: Good drivers know they should brake (a) before entering a curve? (b) on the curve? Answer: (a). Never brake on a curve. It can cause a skid. Good drivers cut their speed in advance so they can accelerate very slightly as they round the curve.

Question: It is advisable to slow down below the posted speed limit when (a) other traffic is whizzing past you? (b) it's raining? or (c) a police car is behind you? Answer: (b) Speed limits are set for normal, good-weather conditions. Slow down in bad weather.

SD Library Seeking Historical Manuals

To augment its aviation historical collection, San Diego Public Library is asking Convair people for used aeronautics or aeronautical engineering material.

The city library is interested especially in old brochures, engine repair manuals, old annual reports of aircraft companies. Books, pamphlets, magazines, or any kind of material dealing with aeronautics will be accepted at the information desk of the central library or any of its branches.



"You remember little Herbie Smith . . . He used to carry all our books to school for us!"

Lost $20 Returned To Grateful Owner

Lily Kieliscek (SD Dept. 138) inadvertently dropped a $20 bill in a restroom in Bldg. 3, Plant 1, a couple of weeks ago. Searching everywhere, she was positive that it was gone for good.

Meanwhile, Doris Harrison of Dept. 129, who had found the bill lying on the floor, was inquiring throughout the area for the person who had lost the money. Friends directed her to Lily, to the latter's great relief.

BRITISH VISITOR FINDS CONVAIR'S PLANTS CLEAN, SAFE

England's Ken Harrold stopped by Convair Fort Worth on his way back to Great Britain after spending a "fortnight" with Atlas engineers at Convair Astronautics.

Harrold, chief designer of the IRBM structure for DeHaviland Aircraft Co. in Hatfield, England, said his company has a commercial agreement with Convair Astronautics which enables their engineers to visit.

"We're hoping that Convair will eventually send some people over to see us on an exchange basis," he commented. "Now we're sending about four people every six weeks to Convair Astronautics from our plant in England."

Harrold said he was amazed at the size of the Convair plants. But the thing that impressed him most was good housekeeping.

"I say, you chaps have clean and safe plants," he commented about the Fort Worth facility just before leaving at tea time.

North Africa Greets 102s

First F-102s to arrive on the North African continent swept down on the Tripoli site of Wheelus Air Base last month to begin an advanced training program.

Four of the Convair jet interceptors, assigned to the 525th Fighter-Interceptor Squadron at Bitburg, Germany, flew to Wheelus to begin check-out of pilots in the weapon system.

The rotational training program will see F-102s arriving at the USAFE Weapons Center base in groups of four at a time. First pilots to undergo the training in the F-102s were Maj. B. H. Barton, Capt. Ray Girard, Capt. Don Leonard, and Lt. Alan L. Lomax.

Convair San Diego field service representative, G. S. Matthews, will be at Wheelus Air Base for two months to support the F-102s on the site. There from Bitburg to lay the groundwork for the F-102 program were Convair SD men, O. B. Johnson, field service rep, and Norman Picard of service parts.

Panel For 880 Designed For Minimum of Noise

Now going into the fifth Convair 880 are the overhead hat rack panels made especially for the interior of Convair's huge jet transport.

Designed by Convair SD engineers, the fiber glass canopies are more elaborate than any used in other Convair transports, with the panels shaped to fit the contour of the plane.

"The 880 panels have been acoustically designed to minimize noise in the airplane," explained Richard Parsons of the 880 project office.

Two of the panels containing passenger convenience pods are going into the club compartment while six, three on each side, will be installed in the passenger section. Four stowage compartments are placed in between the panels on both sides of the plane.

Each passenger convenience pod contains individual air outlets, oxygen, reading light, and stewardess call, while wiring for the public address system and ducts for the heating and air conditioning are attached to the panels.

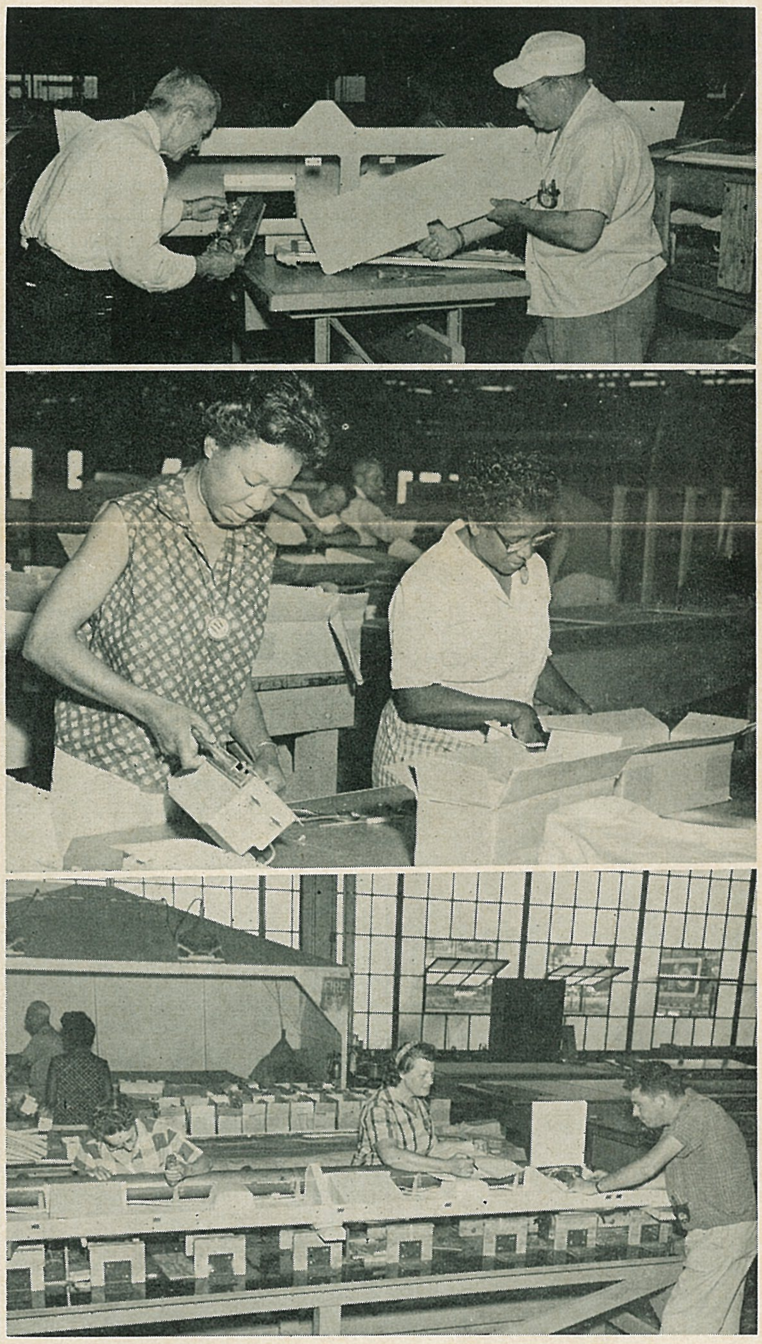
Assembly of the first 40 ship sets is being done by SD tubing and fabric, under L. R. House, general foreman, on the mezzanine of Bldg. 3 at Plant 1. "We have 23 people now working on assembly of the panels," said N. T. Maisheff, Dept. 117 assistant foreman. "And we have already completed the first set which went into plane No. 4, first plane to have interior trim installed."

Components of the panels are subcontracted, although metal brackets and electrical harnesses are being made at Convair SD.

Nimble-fingered girls put together the different articles which go into the oxygen kits, first to be placed on a Convair transport.

"Low velocity air outlets designed with emphasis on acoustical objectives are also an innovation with the 880," continued Parsons. "Draft and noise-free, they will make the plane more comfortable for our passengers."

Panels will be covered with plastics and materials to match interior color scheme and decor of the different customer airlines' planes.



880 PANEL ASSEMBLY—In top shot N. T. Maisheff, Dept. 117 assistant foreman at Convair SD, and D. E. Wilkinson (Dept. 117) inspect rear stowage box to go into fifth Convair 880. In center, Daisy Adams and Nettie Page assemble oxygen boxes, part of equipment of hat rack panels, while in bottom picture, from left, Faith Hoag and Eula Farnsworth, both Dept. 188, inspect panel on which Jack Ropon (Dept. 180) is working.

Taxiing Amphibian Challenges EAL Convair on Tampa Runway

An alligator recently challenged a Convair-Liner in Tampa, Fla., according to F. H. Hollingsworth, Convair field service engineer in Florida.

Seems an Eastern Air Lines Convair, landing in a heavy rain, found Runway Nine occupied by an alligator which had not advised the control tower of its intention to taxi.

When the gator failed to file flight plan, three EAL ramp servicemen stalked the violator. The gator turned out to be an angry female over eight-feet long.

While Mrs. Gator busily bit the muffler off the Eastern pick-up truck and crushed the bottom of the door with her jaws, the agents managed to secure her business end with a rope and return her to the terminal.

There she proved to be a very irate customer. But with a great deal of advice and encouragement she was persuaded to file flight plan to the Tampa Zoo.

C-V CONVAIR

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Convair Division of General Dynamics Corporation.

Convairiety

San Diego EDITION

(Serving San Diego Division of Convair)

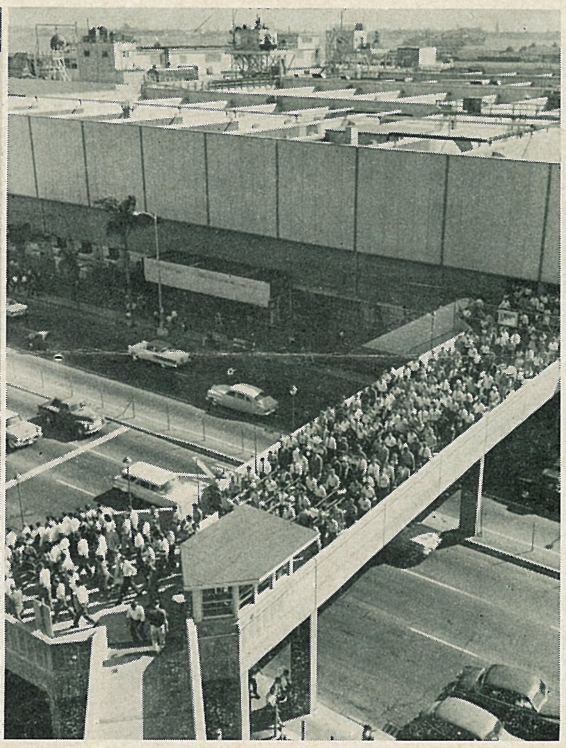
SD Division news office: Plant 1, Bldg. 32, ext. 1071.

Vol. 12, No. 17 — Wednesday, August 19, 1959

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



CRAFTSMEN — Among these, flowing from SD's Plant 1 at overpass No. 2, are some of many craftsmen whose skills are reflected in 880s.



ENGINEERS—And among these, leaving engineering buildings at overpass No. 1, are engineers to whom Convair president referred last week.

PRODUCTION PILOT CAPTAINS 880 NO. 4 ON MAIDEN FLIGHT

Third Convair 880 jet transport to take to the air, plane No. 4, swept aloft last Monday (Aug. 10) for the first time as it joined its two sister ships in flight test.

The first 880 made its maiden flight Jan. 27 and the second plane in flight test, plane No. 3, went into the program in March.

Piloting the new ship was W. D. Carrier, production flight pilot, with Don Germeraad, chief 880 engineering test pilot, as co-pilot on the first flight. The craft will be flown by production flight pilots, although first production flight plane, No. 5, is still in final assembly.

Other crew members were Dick Bloom, flight engineer, who also checked out two other flight engineers, Jack Fogleman and Jack Rogers; Bob Palk, flight test engineer; and Warren Walker, flight instrumentation engineer.

The last plane to go into the engineering flight test program, plane No. 4 will be in test throughout the rest of this year. As production systems test plane, it will undergo an intensive checking out of communications, air conditioning, and acoustics systems during the next couple of months. In October it is scheduled for a layup to incorporate all changes found necessary from testing of the first two 880s.

By November the plane should conform to a final production craft and be set to take on its basic assignment—functional and reliability testing for the Federal Aviation Agency. In this capacity the plane will be flown a minimum of 150 flight hours on regular airline runs across the United States.

Cross-country and intermediate hops will be flown by a joint Convair and FAA crew. Tentatively-planned routes are non-stop flights to New York and Chicago; intermediate route hops to Kansas City, Atlanta, Miami, Denver, Albuquerque, San Francisco, Phoenix, and Los Angeles.

This plane is ultimately destined for Delta Airlines, which receives its first 880 in January.

Plane No. 1 resumed flight status last week after a five-week layup for changes to flight control systems and landing gear hydraulic system. It is now back in stability and control tests and high-speed flutter testing.

Second 880 in flight test, plane No. 3, completed first portion of its test program last week and is now laid up in field operations for the same changes made on plane No. 1. It will be ready to go to Edwards AFB next month for takeoff and landing tests.

Fashion Show Ticket Sales Start Monday

More than a dozen shops will display their wares on Convair San Diego models at a veritable country fair of styles at the Sept. 15 "Fall Fashion Carousel."

Tickets will go on sale next Monday (Aug. 24) at 9 a.m. for the first CRA fashion show to be held in over a year, said Martha Woodberry, commissioner of CRA women's activities.

Convair San Diego ladies and their guests will have a chance to take a look at new and coming styles at the admission price of $1 each. Tickets will be sold at Plant 1 and Plant 2 employee services; Fordham St., office of Bessie Cooper, ext. 100; Rose Canyon, offices of Dorothy Kniffen, ext. 2239, and Virginia Cannon, ext. 2125.

Convair models will parade around the pool at the Mission Valley Country Club in a pink and white carousel setting at the Tuesday (Sept. 15) show slated to start at 8 p.m. Dessert refreshments and door prizes will be provided.

Commentating on the new fall fashions supplied by a number of La Jolla shops will be Edith Antelline, well-known SD charm school director.

Modeling will be Joyce Simon

(Continued on Page 2)

Bloodmobile Visit Slated for Plant 2

Next bloodmobile visit to Convair San Diego is scheduled for next Thursday (Aug. 27) at Plant 2.

First-shift donors are signing this week with their supervisors, said Ken Wulfemeyer of SD employee services. He said that he expects Plant 2 volunteers to equal the 146 pints collected at Plant 1 during the July bloodmobile visit. This would carry Convair SD's blood credit at the San Diego Blood Bank through another couple of months.

The bloodmobile will be located in Bldg. 3 at Plant 2 from 10 a.m. to 2 p.m.

Jet 880 'Bugged' In Sound Tests

Microphones will be picking up all the interior sounds of a Convair 880 to see just what future passengers will be hearing when Convair jets begin zooming along regular airline routes next year.

Acoustic tests for the 880 will be going into final stages with noise level testing on a flight on plane No. 4 this month.

"With the current in-flight tests, we are proving out 880 interior design concepts conceived two years ago," explained J. F. Woodall, acoustics design supervisor.

"This final phase will check

(Continued on Page 2)

Palmdale Men Win RX Cash

Two more Convair Palmdale men are winners of RX awards.

The July $1,000 award will go to Francis N. Gagnon, a post installation foreman in Dept. 321-2 at Palmdale. His proposal to shorten the post installation time for the F-106 air to air identification subsystem test will save Convair an estimated $18,385 during the next year.

Hugh B. Scott, a layout man in Dept. 324-4 at Palmdale, will pocket the July $500 award. His suggestion to recondition tools previously discarded will net Convair savings of at least $7,728 during the next 12 months.

Naish Offers Tribute To Designers, Builders

"These achievements by the 880 are a tribute to the many skilled engineers who spent thousands of manhours on the design of the nation's most advanced luxury jet airliner, and a justification of our faith that Convair craftsmen would produce not only the fastest but the most versatile jet aircraft."

Such was the comment last week of Convair President Jack Naish as he announced that six months of flight testing have proved the 880 jet transport can fly 615 mph in level flight—faster than any commercial passenger plane in the world.

Naish said the flight test program has demonstrated that the 880 attains its level-flight 615-miles-an-hour true air speed with maximum cruise thrust from the plane's four General Electric CJ-805-3 turbojet engines.

Moreover, Naish said, flight testing also has established that the 880 meets or exceeds all of its other performance estimates, including the predicted short takeoff and landing runway lengths for which this medium-range jet airliner was specifically designed.

In addition, engineering estimates of the 880's range and fuel operating economy have been confirmed by data accumulated during 250 hours aloft on 130 flights with the first two test aircraft.

This is true, Naish said, not only for the 3,450-statute-mile maximum range, when the 880 is flown for best economy, but also for lesser, medium ranges flown at higher speeds. In every instance, fuel consumption by the four CJ-805-3 engines equals or betters the estimates at each of several altitudes for which flight data have been taken.

Naish praised the reliability both of the 880's engines and of the airplane itself. "Reliability and performance of the General Electric CJ-805-3 engines have been outstanding," he said. "The engines have never interrupted or delayed a test flight."

The certified landing field length for the 880 with full first-class payload was estimated at 5,350 feet when the 880 design was established three years ago. Landing tests to date have shown this distance may be significantly shortened.

Landing roll was tested by using brakes only to slow the airplane—in other words, without applying engine power to the thrust reversers with which the airplane is equipped. The use of the General Electric thrust reversers, already proved out in exhaustive taxi tests, will provide an additional safety margin.

The runway length required for an 880 takeoff has been demonstrated to be well within the estimates made to airline customers. Naish said the distance

(Continued on Page 2)

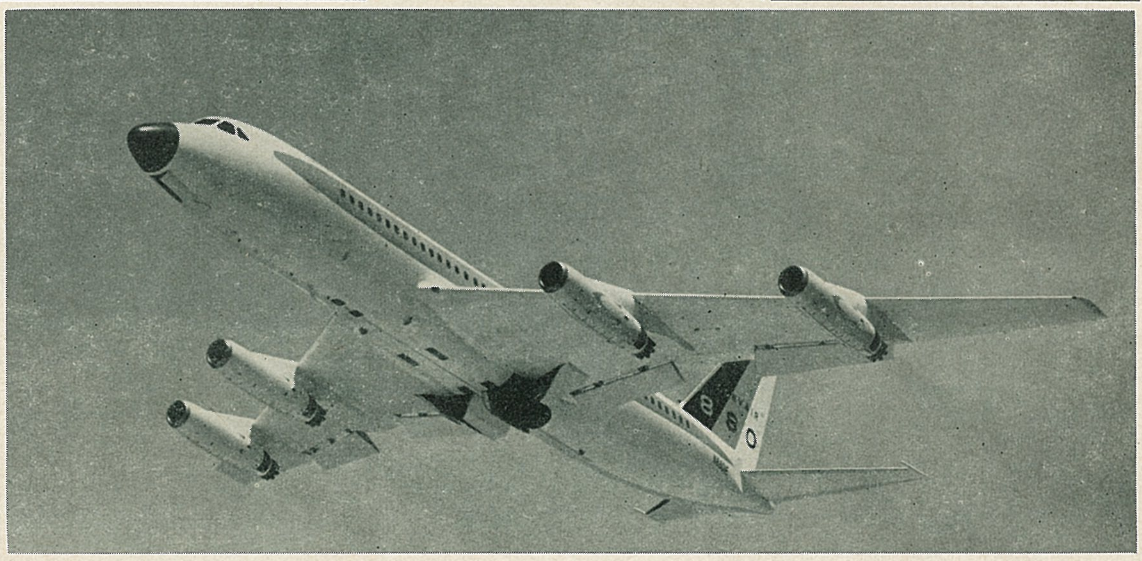
Frank Pace Explains Emphasis on Research

"Past research and development expenditures are largely responsible for current Corporate product achievements," Frank Pace Jr., chairman of the board of General Dynamics Corporation, wrote last week in the semi-annual report to share owners.

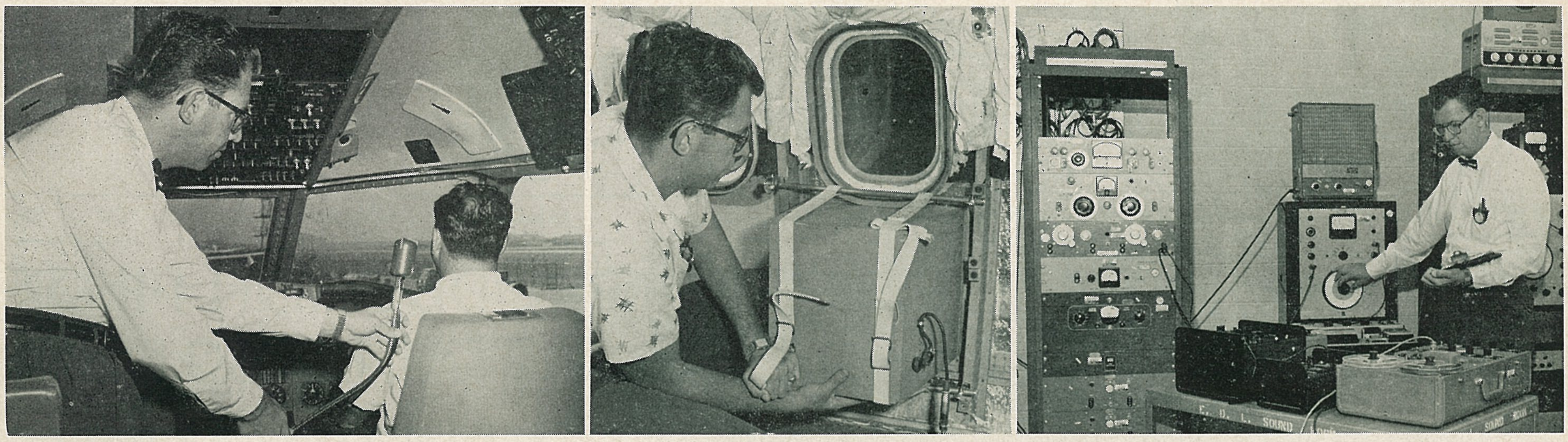
"Present research and development expenditures are greater than at any time in the past. This emphasis on research and development is born of my conviction that the corporations that will enjoy great growth and leadership in the future are those that are intelligently research minded. These expenditures will, in my judgment, be the basis for expanded earnings and steady, substantial growth over the next several years," Pace continued.

"It is fortunate indeed, that the Corporation is in a position to invest very substantial sums in research and development programs leading to new types of military and commercial jet aircraft, missiles, space vehicles, electronics equipment, industrial and medical gases, nucleared-powered missile-launching submarines, nuclear research reactors and atomic-powered central station electrical generating plants. Such enterprises are the hope and the future of this Corporation and of the nation."

(Continued on Page 2)



JOINS 880 FLEET—Another Convair 880 transport wings aloft to make three Convair airliners now in flight test program as plane No. 4, third to fly, makes first flight from Lindbergh Field last week.



880 'EARS'—At left, G. H. Bosco, Convair SD acoustics test engineer, shows how microphones will be placed to pick up sounds in Convair 880 transport when noise-level tests are held on plane No. 4. (Back of head in co-pilot's seat belongs to John Contasti of Dept. 160.) In center, box containing microphone is placed in plane No. 1 on preliminary tests run this summer. In shot at right, Bosco is analyzing recording of 880 sounds on data reduction equipment.

Three Score TWA Students Graduate From Jet 880 Course at San Diego

First customer training classes on the Convair 880 jet transport end this week (Aug. 21) at Convair San Diego for approximately 60 Trans World Airlines key personnel.

"We are pleased that our training course, developed over the last two years, appears to meet the needs of 880 customers," remarked L. J. Bordelon, chief of SD transport service. "To our field service engineers is assigned the primary responsibility for presenting training to fulfill the requirements of our customer people. We credit their sincere efforts as well as the cooperation of many other functions in the plant with the successful culmination of our first course.

"Service publications people constructed training aids and produced study manuals to our specifications; engineering design specialists were available at all times to answer questions or to expand on information; while production personnel were more than cooperative during observation in the factory."

First 880 classes given by customer service in their entirety were the electrical course and aircraft systems course, which ended the latter part of July. Line and power plant and electronics courses are scheduled to conclude this Friday (Aug. 21). The six-week courses will be conducted for Delta Airline instructors during September and again for TWA later in the fall.

Here for the transport training were maintenance instructor personnel from New York, Chicago, Los Angeles, and San Francisco, and engineers, shop and hangar foremen, technical editors from TWA headquarters at Kansas City.

Also taking the first courses were two Federal Aviation Agency representatives from the Kansas City regional office, Stanley Rogers and E. Watts.

"On-the-job training provided by Convair instructors and mechanical personnel on installation and operation of actual units, such as main landing gear assembly and brake assembly, as well as the opportunity of watching installation of many units going into TWA 880 aircraft on the line, will be of great value in our maintenance training," observed C. K. Sharp, TWA coordinator for aircraft system course.

M. E. Maltby, electrical course coordinator, lauded the use of configurators, developed by Convair SD customer service, for training on 880 systems: "We found the system configurators to be most valuable as training aids from our point of view. They are a new departure in transport training and one which should be of great assistance in learning the plane's systems.

"Another feature which we found exceedingly helpful during our training at the San Diego plant," he continued, "was the Saturday tours through the 880 production area. During these inspection visits on off-working days, we were able to digest a great deal of information about the 880 unhindered by the usual assembly-line activity."

Other TWA coordinators were C. S. Davison for the line and power plant course, and Thomas Jackson, electronics. All were from the Kansas City TWA headquarters.

Naish Pays 880 Tribute

(Continued from Page 1)
may prove to be as much as five per cent less than predicted. This includes a 5,450-foot runway requirement for takeoff under sea level standard conditions on a typical 1,000-mile medium-range trip.

Naish explained that aircraft manufacturers traditionally establish performance estimates of a demanding nature to serve as design goals that will challenge design engineers, fabricators and suppliers to their utmost. Performance guarantees, which are assumed by the manufacturer as contractual obligations when an airline orders the new equipment, often before production has begun, contain tolerances acceptable to both manufacturer and airline.

It is rare, therefore, that a new aircraft can meet or exceed the performance estimates conceived at the drawing board stage. This, however, the 880 has done, Naish emphasized.

Frank Pace Explains Emphasis on Research

(Continued from Page 1)
Consolidated net sales for the first six months of 1959 ($752,-394,000) were slightly lower than those of the corresponding period of the previous year ($789,-747,000) due primarily to completion in 1958 of the USAF F-102 interceptor program and Canadair's F-86 contract together with the phasing out of the Convair 440.

A major factor contributing to lower net earnings for the first six months of 1959, as compared to the same period in 1958, was the expenditure of $18.2 million for engineering research and development in connection with the Convair 880/600 commercial jet aircraft. This is an increase of about 84 per cent over the $9.9 million expended during the same period in 1958, the report continued. It is anticipated that research and development expense on the 880/600 program will continue at a high level for 1959 and decline substantially during 1960.

Net income after U.S. and Canadian income taxes was $10,-658,000 for the first half of 1959 as compared to $20,052,000 for the first six months of 1958.

Backlog of unfilled orders on June 30, 1959, is estimated at $2,483,000,000.

★ Convairiety ★

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Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Angler Rescues Four Off California Coast When Boat Swamped

A Convair SD man, out for a quiet Saturday of fishing, rescued three men and an eight-year-old boy Aug. 8 when their boat was swamped in choppy seas off the coast of La Jolla.

Fred Kirkman, foreman in Dept. 406, and his brother, John, were the first to reach the water-logged 18-ft. motorboat.

"It was only a few minutes from the time the boat swamped until we appeared on the scene," Kirkman said. "At first I thought they were signaling to me to stay clear of the area. But it was soon obvious they were in distress. The boat was starting to go down by the stern."

Kirkman later turned his charges over to a Coast Guard patrol boat and then went on fishing.

BS Degree Climaxes Night Study Course

For H. A. Stahl, assistant supervisor in Dept. 288-3 at Convair SD, where there's a will there's a way—and a pretty fast way at that.

In addition to performing his duties at Convair, Stahl for the past few years has attended San Diego State College at night (with a substantial amount of the cost paid through the Convair scholarship program).

Last week he received his BS degree in industrial management. How long did it take Stahl to complete the four-year course while putting in a full day's work every day at Convair?

Exactly four years!

880 'Bugged' to Catch Sounds of Jet Flight

(Continued from Page 1)
out the decisions made on the types and amounts of materials used in the interior. Through experiments in the echo-free and reverberation rooms of the dynamics lab's acoustics test chambers, we arrived at the present interior configuration as the best possible combination, considering weight, for the passenger's comfort," he continued.

Objectives of the acoustics design group of engineering, working with other design functions, was to design an interior for the 880 from the basic structure or outer skin, through the different layers which go to make up the inside configuration—the damping tape (metal foil tape covering the interior of the skin to deaden metallic noise), and fiber glass wall blankets, to decorative walls and trim—that would result in quiet, comfortable surroundings.

Using a weight vs. sound formula, different kinds of fiber glass to serve as sound-proof lining were tested to see which would absorb the most sound. Different ways of mounting windows were tried until the present three-pane windows were adopted.

"We worked toward a uniform sound level throughout the plane, one that would permit passengers in adjoining seats in any section of the plane to talk to each other in an ordinary tone."

Sound of the jet engines, coupled with air noise at the high speed of jet planes, make the task of the acoustic design engineers more difficult than on the former prop-type transports, such as the Convair-Liner.

Besides the exterior noises, microphones riding in Convair's newest jet will be picking up the contributing inside noises generated by the ventilation system and auxiliary equipment.

Microphones will be spotted at different points from the tail section to the cockpit to see just how well the actual product is meeting Convair's acoustical guarantees and customer airlines' design specifications.

Noise picked up by the microphones is recorded by tape recorders so that the acoustical impulses may be analyzed on data reduction equipment in the acoustics lab under direction of G. H. Bosco, acoustics test engineer.

Data now is being reduced from the first in-flight evaluation made earlier on Plane No. 1.

Ticket Sales Start Monday

(Continued from Page 1)
(Dept. 2-2); Betty Tyler (Dept. 603-6); Virginia Hollister (Dept. 1-16); Shari Fox, AF office; Pat Rauzon (Dept. 3-3); Vee Dobbs (Dept. 15-3); Melba Brown (Dept. 95); Melissa Empey (Dept. 11); Judy Shaw (Dept. 44); Sharalyn Heeren (Dept. 5); Ginnie Rogers (Dept. 600-1); Betty Young, whose husband, Wesley, is in Dept. 400-1; Mary Gunn, whose husband, Lyman, is in Dept. 215; Rene Hammond (Dept. 15).

Daughters modeling are Nancy Smith, whose father, Earl, is in Dept. 34, and mother, Mary, in Dept. 6; Suzanne Murdock, daughter of T. D. Murdock (Dept. 6); Rhonda Hampton, daughter of C. R. Hampton of AF office; Christine Matthews, daughter of Cdr. W. A. Matthews of BuAer Navy office; and Sharon Black, whose mother, Anita, is in Dept. 98.

Stores participating, all of La Jolla, include Ballard and Brockett, Claire Stuard, Coral Door, Elizabeth Parsons Shop, Helen Deng Originals, Jix, Stevenson's, The Highlander, Scott's. Accessories will be furnished by Dejarnette's, millinery; Magic Mirror Cosmetics, makeup; La Jolla Opticians, eyewear; Burriston's Fine Shoes, footwear.



CAROUSEL FUN—Getting into merry-go-round spirit of CRA "Fall Fashion Carousel" Sept. 15 are Convair San Diego models (left to right): Virginia Hollister (Dept. 1-16); Betty Tyler (Dept. 603); Nancy Smith, whose parents are both at Convair SD; and Joyce Simon (Dept. 2).

It Might Interest You To Know...

Convair employees are "paid" about 17½ per cent more in benefits than appears on their paychecks.

For "on-the-job" insurance protection
YOU pay nothing a year. Convair pays about $750,000.

State workmen's compensation laws set forth the responsibilities of the employer (in this instance, Convair) in regard to any accident "arising out of or in the course of employment."

For protection, Convair retains an insurance company to act as the administrative and paying agent in such cases. In effect, however, these are Convair dollars that are paid out.

Convair picks up the tab for all hospital and medical expenses authorized by its medical sections 100 per cent, plus payment of subsistence to the individual during disability. Plant physicians monitor all the injury cases and determine where the patient will be treated and call in such specialists as may be required.

Although Convair plants are among the safest in the industry, as evidenced by continuing safety awards from the National Safety Council recognizing the fact, some accidents do happen and they can be expensive, not entirely for the hospital-medical costs, but from a standpoint of administration. Convair continues to pay fixed sums weekly for partial or complete disabilities that followed accidents which happened many years ago.

The sums of money involved which are paid to employees who suffer disabling accidents are usually determined by industrial accident commissions following careful scrutiny.

During 1958 the cost to Convair of workmen's compensation protection amounted to about $750,000. This, of course, included all Convair divisions and facilities.

Home Accidents Lead Injury Toll for July

Convair SD people continue to be involved in a wide variety of away-from-plant accidents, but severity during July appeared to be not as great as in June.

Although only figures for Plant 1 were available, there were some 135 separate employee group insurance cases involving accidents "closed" during the month. Dollar value in group insurance claims paid was $8,182.

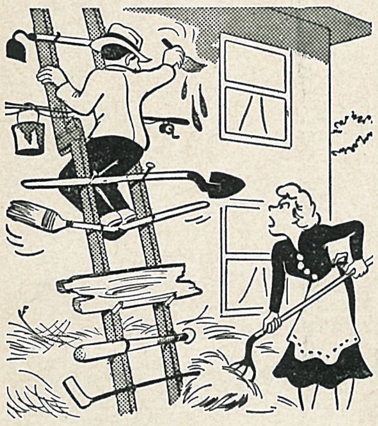
Gasoline, Charcoal Make Fiery Mixture

One Convair SD man (who asked that his name be withheld because he is embarrassed by pulling such a "stupid trick") has used gasoline to start a charcoal fire for the last time.

"I was at the beach. The fire wasn't catching very fast. I had a few inches of gasoline in a can and started to pour it on the un-burned charcoal. There was a flash and my whole arm was severely burned. I had to jump into the water to put it out."

For a similar period in June for both Plants 1 and 2 the dollar toll was nearly $17,000, and accident total was about 150 (Convairiety, July 22).

There appeared to be a drop in auto accident injuries. Sixteen



were reported for claims, the highest being $306 for broken collar bones and ribs with estimated four-week disability. Another, a broken elbow and off work three weeks, cost $140. Face cuts in another car crash cost 20 days away from work and $245.



Home accidents led the list by far, both in point of numbers and cost. There were 79 injuries in or around the home for a total group insurance cost of $4,988. Most were comparatively minor. (There were 53 with medical costs under $50.) The list included a bewildering variety of broken toes, sprained backs, cut fingers and hands, broken noses, etc. There were even several dog bites and one was a $70 hand injury while chasing a cat!

A herniated disc, suffered while twisting out of a motor car brought a $450 bill and a hernia sustained while lifting accounted for another bill for $550 and estimated lost time of 30 days. A finger cut in a wood cutting machine cost $70 in insurance and 29 days lost time. A cut leg suffered in a fall through a window brought $300 in medical bills and an estimated disability of six weeks. A hand saw cut brought bills estimated at $600 and three months off.

In point of numbers, lifting too heavy objects, slipping and falling seemed to be the main culprits.

Sports continued to exact a toll in pain and medical bills. A dozen were associated with water sports. Eight involved baseball (with a broken leg sliding into second base topping the cost list at $320). A hand broken in another game brought a bill for $250; and teeth lost while trying to catch a foul tip involved a $70 toll.

Of the boating injuries a scalp cut ($125) was high. This victim, incidentally, was still off the job at presstime.

There was even a $28 claim for coffee burns on a camping trip!

Convair's Palmdale facility has its share of employee off-site injuries, too. Over a recent period there were these: sprained shoulder in fall from truck, $50 and six days disabled; toe injured when stone block fell in garage, $15 and two days off; infected toe nail, $47 and five days off; fractured toe, kicking trash can, two days and $30.

Traveler Directs Appeal to Convair

Hans Marx, a resourceful 26-year-old German, this month directed an unusual appeal to Convair families.

He hopes to visit the U.S. soon but will be operating with limited funds. A number of "pen pals" have offered to let him stay in their homes for brief periods during a tour of the country, but all are located on the east coast. He wants some volunteer hosts from other sections of the country, particularly California which he expects to reach first, via the polar air route. His address is Saarbrucken-Schonbach, Auf der Unner H 24, Germany.

'Free' Benefits Cost Convair Each Year

(Where possible, exact figures for 1958 experience are given. Others are approximate.)

For Vacations:
$15 1/2 Million

For Holidays:
$12 Million

For Sick Leave:
$5,639,257.
("Direct" employees alone.)

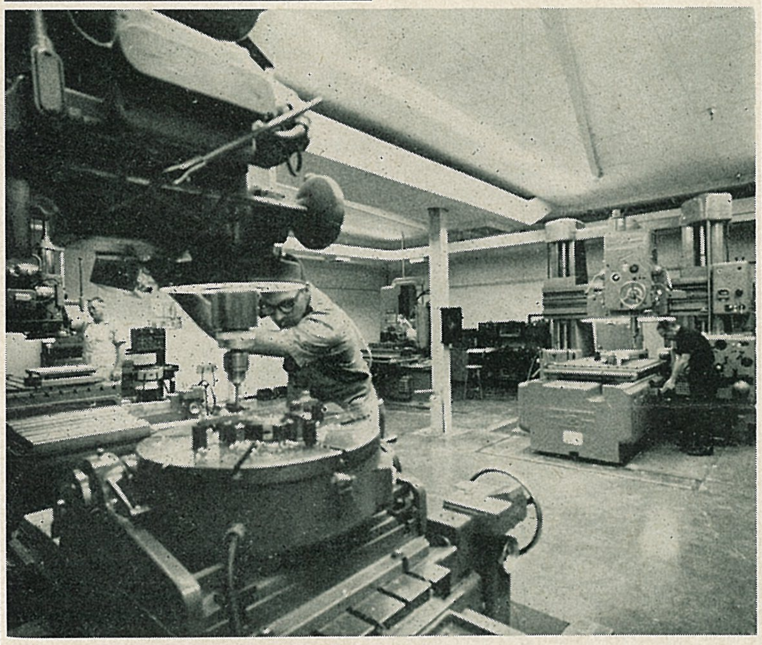
For Rest Periods:
$9 1/4 Million

For Shift Bonus:
$4 1/2 Million

For Retirement:
$14,394,871.

For Insurance:
$5,206,398.

(This was the cost to Convair in 1958 for employee group insurance, over and beyond contributions of employees.)



CONSTANT—Tooling and production work goes on in this temperature controlled room at Astro with both vertical and horizontal jig borers. On right is combination of both, capable of splitting a human hair into 30 parts!

F-106 Noses Protected on Trip To San Diego by Heavy 'Coffins'

Convair F-106 nose sections continue to move at a steady pace from Convair Fort Worth to support Convair San Diego's production of the supersonic interceptors.

The Fort Worth work is done by Dept. 46, F-106B nose assembly, in an assembly line operation adjacent to column 89-B in the assembly building.

When a nose section is complete, it is carried by the overhead monorail to the 50-foot aisle, where a contractor's truck is waiting—and a Convair traffic department crew is ready to load the huge component.

The nose is loaded on the truck, tied firmly into place and covered with a steel canopy which resembles nothing so much as an over-size casket. This protects the nose section from dust and weather on the long trek to the West Coast.

Entire loading operation, according to traffic department's L. L. Roberts, takes only about 30 minutes.

The truck-trailers that make the run to San Diego are operated by a contract carrier out of Grand Prairie, Texas. Empty they weigh 19,680 pounds, loaded with a nose section, 36,000 pounds.

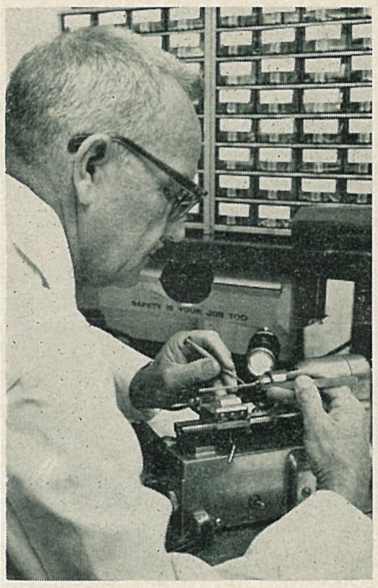
State Examination Forms Are Available

Astronautics employees interested in taking examinations leading to an engineer-in-training certificate on Nov. 14 have until Sept. 1 to make formal application.

The examinations are being conducted by the State of California Board of Registration for Civil and Professional Engineers. Application forms are available through educational services offices.

Special 'Climate Controlled' Area Used for Precision Work

"Drunken" thread checks, following tolerances to the millionth of an inch and knowing the expansion qualities of every type of metal, are everyday tasks for men who man a pair of unique Astronautics facilities.



TINY—W. C. Malotte of Astronautics tool and gage room is using one of smallest lathes in plant to repair precision instrument.

They work in "back-to-back" facilities located in the low bay area of the Astronautics factory.

One has been in operation for some time. It is a precision tool and gage room maintained by inspection.

The other, which went into around-the-clock operation on a full scale for the first time late last month, is a special temperature controlled tooling and production room operated by the tooling department. This is the latest thing in the field of missile manufacturing and represents the first facility of its type among Convair divisions.

Temperatures in both are rigidly controlled, with the requirements of the former calling for 68-degree temperatures at all times with a relative humidity below 50 per cent.

The tool and gage room maintains all mechanical precision master gages for the plant. These gages must be at least 10 per cent more accurate than normal production, tooling and inspection gages. Never out of the special room, these master units are used to check production units at varying intervals.

Also in use is the "drunken" thread checker, a device so accurate it can detect a slight variation of threads on belts in missile parts.

A gage block comparator in use for gage checks has an accuracy rate of within .0000001 (one-millionth) of an inch. (One millionth of an inch compares to an inch approximately the same as the thickness of a human hair compares to the height of the El Cortez Hotel in San Diego!)

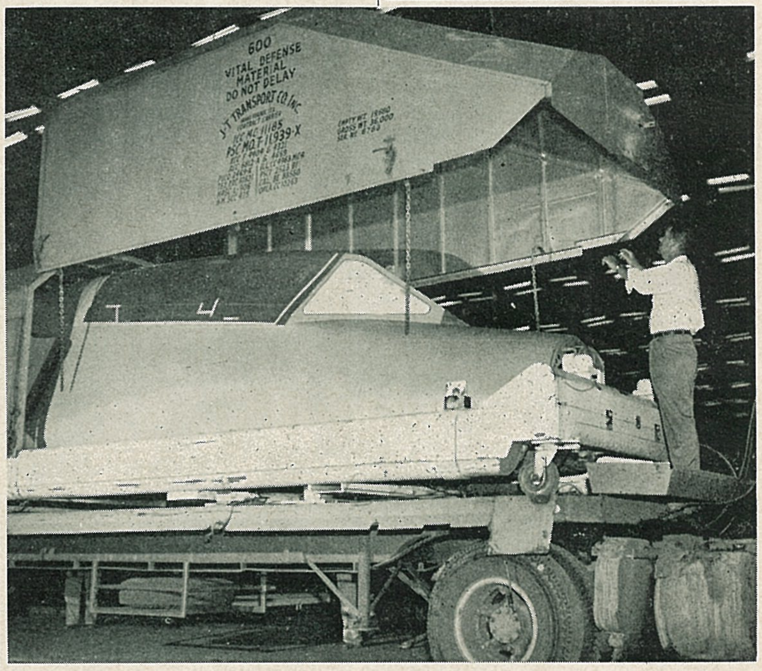
The tooling-operated room is 40x33 feet, enclosed and also kept at controlled temperatures at all times. It is equipped with two vertical jig boring machines, one horizontal jig borer and a fourth unit capable of performing boring operations both horizontally and vertically.

Used for both tooling and production work, the room allows for compensation of expansion in metals being worked.

For instance, a piece of metal exposed to changing temperatures in the factory would expand or contract, often enough to throw off the exacting tolerances required in critical cases.

For this reason, parts or metal to be drilled are brought into the room well in advance of operations to allow them to reach room temperatures comparable to that of the machines.

The combination horizontal-vertical jig borer is the very latest in precision equipment. It was manufactured in Switzerland and installed to rigid standards. It can perform work to tolerance of .0000050 (fifty millionths) of an inch. This precision could be utilized to split a human hair into approximately 50 pieces!



EASY DOES IT—L. L. Roberts, assistant foreman in traffic, helps crate F-106 nose section for shipment from Convair Fort Worth to San Diego. Nose section is made at FW Division, rest of airplane in San Diego.



SEPARATED — Rufie Crunk, right, who started with Convair Fort Worth in 1942, tells pert Sandie Glick Feld of days when men and women had separate entrances to plant. Both are in Dept. 4.

'Women Only' Sign Relic of War Days

One of the last World War II reminders was taken down at Convair Fort Worth recently when the "Women Only" sign was removed from the entrance to employee Gate 5.

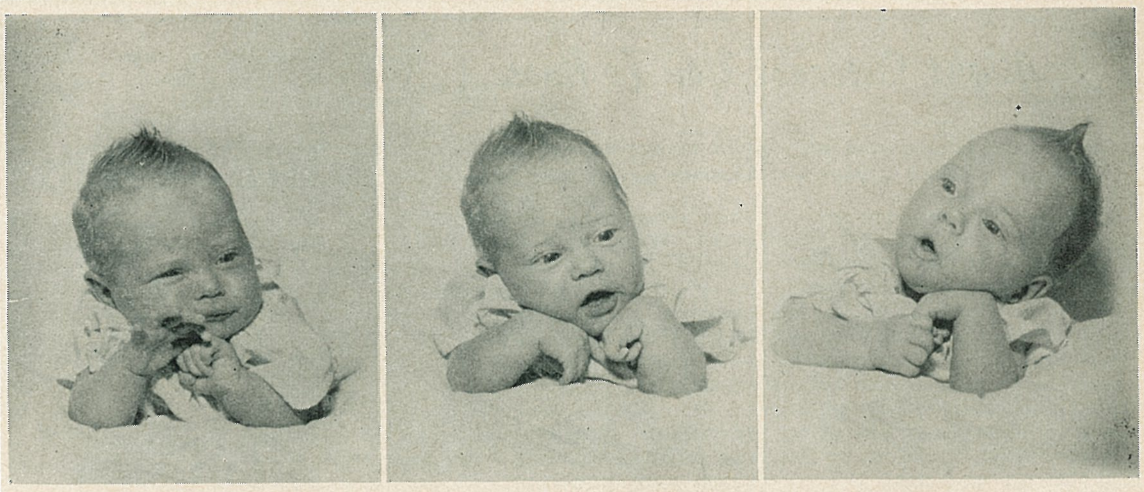
As an extra security measure during the war, Convair men and women entered by different lines.

Lt. Clay Wilsford, pioneer with Convair Fort Worth's industrial security force, recalls when the then Consolidated Aircraft Company installed the separate gates. He said this was done because guards were required to search men both upon entering and leaving the plant.

Rufie Crunk of Dept. 4-3, who started with the company in 1942, said she remembers how guards used to open up the women's purses.

"No, the guards didn't search us," she said, "but if there was any question, women were referred to a woman counselor."

Back in those early war days, there was a guard stationed in the lobby with a rifle over his shoulder.



YOU TRY IT—Convairiety staffs at both Fort Worth and San Diego have wrestled unsuccessfully with problem of making up some quotes for these poses of Cheryl Lynn Brock, three-week-old granddaughter of Fort Worth's Wally D. Ray of service engineering. None seemed good enough to do justice, so make up your own.

Simple Idea Will Save $2,271; FW Man Pockets $227 as Result

A "one inch" Employee Suggestion will put $227.10 into pockets of Convair Fort Worth's A. C. Clay and at the same time save Convair an estimated $2,271.

Clay, who works in Dept. 31, suggested that wing slug bathtub operators could cut two tubs without having to change the set-up if the tool holder was made one inch longer and the tracer changed.

Prior to the installed suggestion, router operators had to make a new set-up after each tub was cut. Then each operator was cutting an average of 300 tubs per day requiring 300 different set-ups.

The suggestion has reduced the set-up time by 50 per cent and has increased the output of bathtubs by 75 to 150 more per operator per day.

Others with sizable savings include F. DeLeon and A. Cronk of Depts. 48 and 24 respectively, $1,762 in savings; J. G. Swanner of Dept. 48, $1,636 in savings; J. D. Overstreet and J. R. Brumley of Dept. 35, $1,490 in savings; J. D. Lagadinos of Dept. 27, $1,219 in savings; and D. D. Hester of Dept. 82, $1,179 in savings.

Is It News?
Call Convairiety



BEAUTIES — Left to right, Debra Ann Lucas, 6, and her sister, Cheryl Sue, 4, got top honors in recent Fort Worth contest. They're daughters of Convair Fort Worth's Edna Lucas of Dept. 11-2.

FW Girls Win Beauty Prizes

Although beauty contest winners generally range from about 16 years up, two Convair Fort Worth youngsters proved that beauty can get top billing even at the four to six-year level.

The two girls are four-year-old Cheryl Sue Lucas and her six-year-old sister, Debra Ann, daughters of Edna Lucas of Dept. 11-2.

Cheryl and Debra each brought home a trophy from the beauty contest sponsored by Fort Worth's City Recreation Centers.

First place in the three and four-year-old group went to Cheryl, who was judged on personality, poise and beauty.

Debra placed second in the five and six-year-old age group and also got a trophy.

Both girls take ballet, tap, tumbling and baton twirling.

Movable Parts of Training Aid Show Different 880 Systems

A training aid developed by Convair SD and put into use for the first time this summer is proving its value in customer training.

Configurators, showing operation of different systems of the Convair 880 jet transport, are being used in SD customer training classes as practical and economical devices for instruction of customer maintenance personnel.

The large charts, photographic enlargements of small drawings, work on a calculator principle to show component positions during different operating conditions. By turning the movable part to a given location, the designated system is outlined in color, making it possible to follow the entire sequence of a system at a glance.

"The configurators have provided a simple, easily-understood means of unscrambling the plane's systems for our customer personnel undergoing training," explained Don Maxion, regional field representative in charge of 880 customer service training.

Five different types of configurators are being used in the 880 training classrooms, fuel system, air conditioning and pressurization, electrical system, and hydraulic braking system. Normal situations are shown on one side and emergency systems and malfunctions on the reverse.

The fifth configurator is in the form of a miniature model engine, 3 inches in diameter and 15 in. long, which pictures location of equipment and accessories. All plumbing and wiring associated with the engine is represented by the basic Army-Navy color coding. For instance, red is used for fuel lines and yellow shows oil flow.

Each 880 customer representative taking the training receives small duplicates of each of the four large configurators and power plant students are given the model engine for their own reference. "Since each student can follow the instructor's lecture on his own configurator and refer to it at any time to refresh his memory, we have found that trainees understand the systems much faster and better," said Maxion.

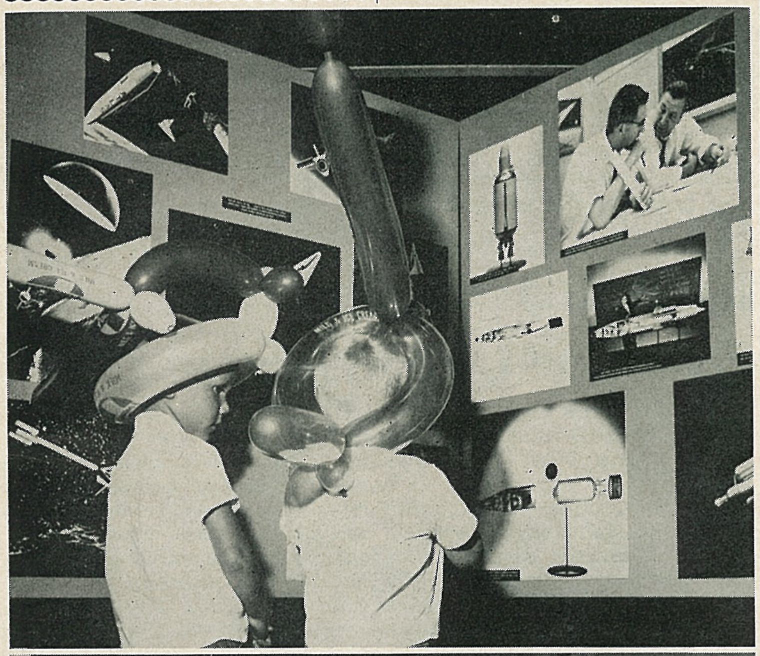
"Other companies and vendors of associated systems are showing interest in the principle for their own use. Certain airlines are considering the basic configurator application for training on other of their planes."

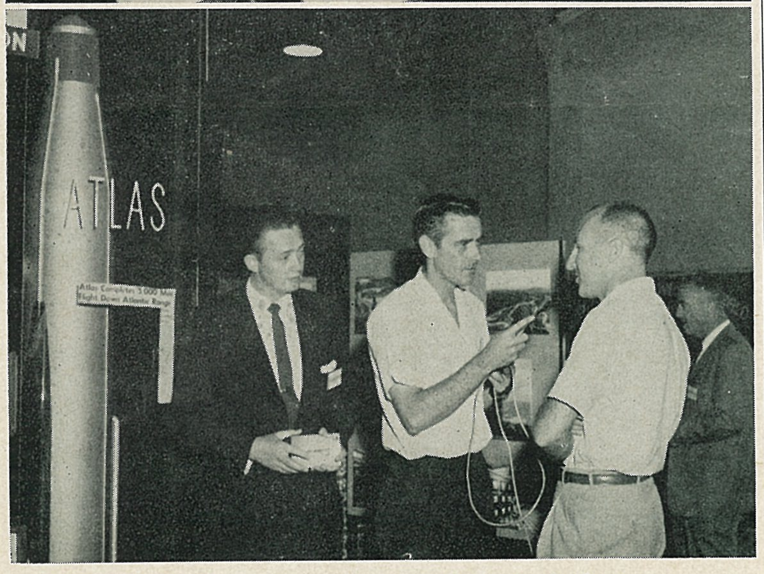
Convair is making the configurators available for purchase by their customer airlines to use in their own training programs.

Detwiler Developed First Concept of Aid

Men in the customer service training program most responsible for development of Convair's configurators are R. H. Detwiler, who worked out the first concept as an inexpensive and adequate training aid less than two years ago. Developing the individual configurators for each system are J. P. Nowak, fuel system; A. W. Koster, engine; H. M. Bohmbach, hydraulic; and R. W. Fitzgerald, electrical.

Actual layout and drawing was done by service illustrations group under direction of Harry Snyder, art editor for the 880 program.





GAWKING—Youngsters above, balloon bedecked, are examining Astronautics photo exhibit at Santa Barbara County Fair at Santa Maria, Calif. They are Dave and Val Barber, sons of Dennis T. Barber, Astro engineer assigned to Vandenberg AFB. Below, Bill Sinclair, radio KCOY, interviews H. P. Conroy, assistant to Base Manager Fenton Miller, right, and W. P. Downey, engineer. In background is J. D. Frisby. Astro exhibits are busy in many parts of country.

Technical Russian Subject of Course

A course in scientific Russian will be taught by a Convair SD man as a UCLA extension course this fall at San Diego.

Kon Worth, SD structures engineer, will teach the 18-session language class, which opens Sept. 23, in Room 213, Roosevelt Junior High School. It will be held Wednesday evenings, 7-9:30 p.m.

Objective of the course is to teach specialists, professional people, or graduate students how to read and understand Russian scientific and technical material. Basic elements of grammar will be included.

SD Air Explorers 'Shoot' Rogue River

Twenty-two boys, members of Air Explorer Squadron 340 which is sponsored by the SD Management Club, are now on the final lap of an exciting 120-mile journey down the Rogue River in southwestern Oregon.

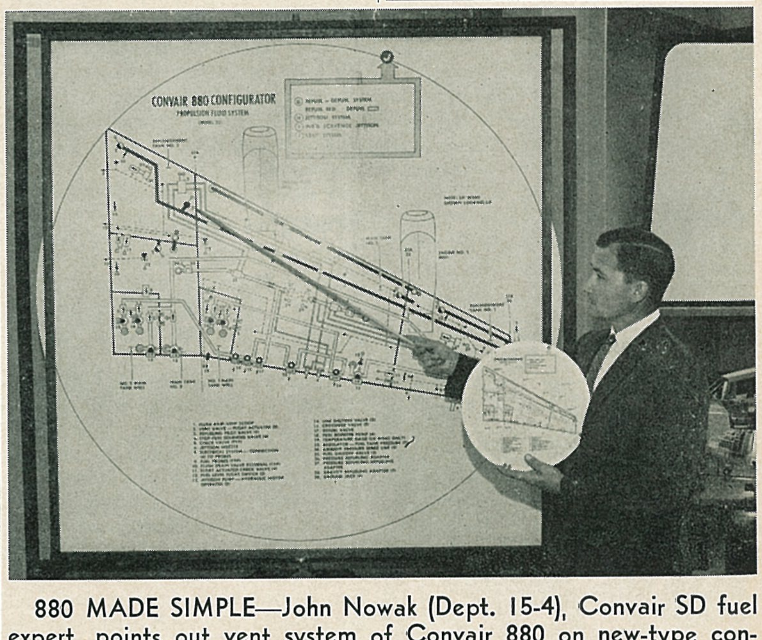
Accompanied by four adult leaders, the boys left by truck on their 21-day journey Aug. 7 from Bldg. 19 parking lot. Their equipment included three rubber assault boats.

Convair Planeload Will Tour Europe

Seventy-nine Convair air travelers, composed largely of Astronautics employees and members of their families, depart Lindbergh Field Saturday (Aug. 22) for a two-week tour of Europe.

This marks the second year such a trip has been offered to employees through CRA sponsorship.

The current group will go "over the Pole" to London, returning to San Diego Sept. 7 following excursions to most of Europe's major cities. While most of the travelers are adults, one is a 16-month-old youngster. Many Convair men and women are using the flight to return to their native homelands to visit relatives and friends.



880 MADE SIMPLE—John Nowak (Dept. 15-4), Convair SD fuel expert, points out vent system of Convair 880 on new-type configurator developed by Convair SD customer training. Small duplicates, like one Nowak holds, are given each customer trainee.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

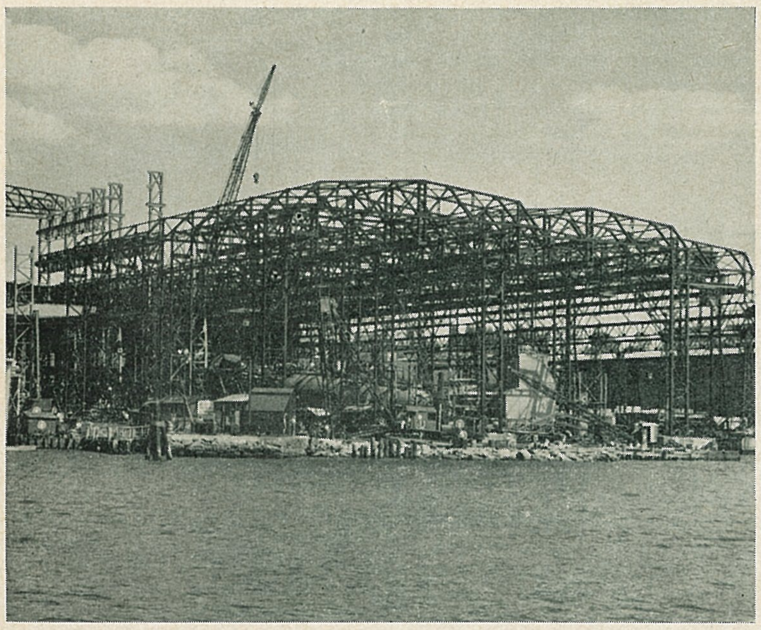
Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.



BIG LIFT—Part of $3 million renovation program at Electric Boat Division are new cranes designed to lift 120-ton hull sections for nuclear submarines under construction there.

Electric Boat Will Assist In First British Atom Sub

GROTON—A contract to provide design, material and technical assistance for the installation of the propulsion system for H.M.S. Dreadnought, Great Britain's first atomic submarine, has been awarded Electric Boat Division.

Model for the first British nuclear sub will be the Skipjack, world's fastest and most maneuverable undersea vessel, which was delivered to the U. S. Navy by General Dynamics on April 15.

The United States has authorized the transfer to the United Kingdom of a complete Skipjack-type submarine nuclear propulsion plant, spare parts, design and related classified information.

Rolls-Royce as agent for the British Admirality has contracted with the Westinghouse Electric Corporation for the complete nuclear propulsion plant.

The keel for the first British atomic sub was laid this summer at the Vickers-Armstrong shipyard, with Rolls-Royce, Ltd., responsible for the propulsion plant.

CONTRACT CONTROL DEPT. CREATED

GROTON—The establishment of a contract control department at Electric Boat Division and the appointment of Joseph D. Pierce of Mystic as manager was announced last month.

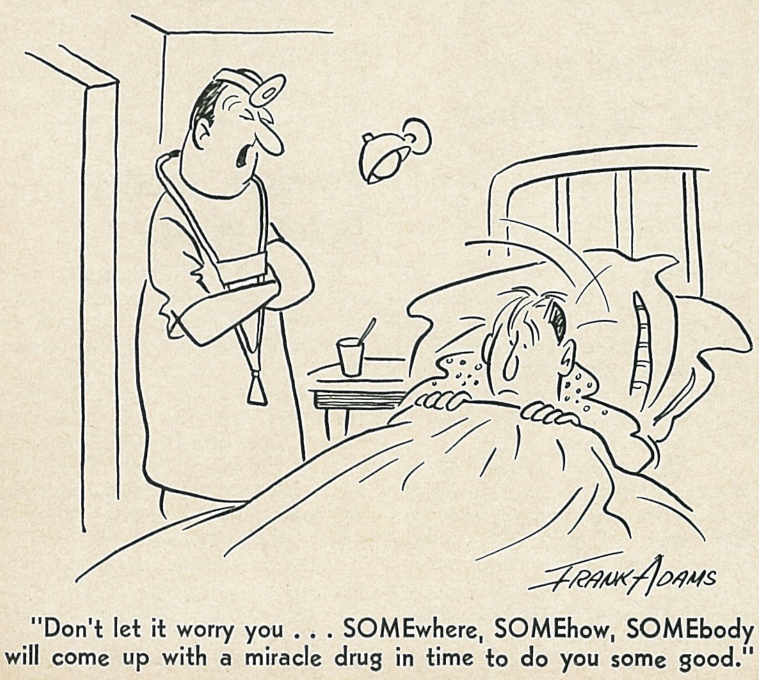
The new department will be responsible for day-to-day shipboard planning and for coordinating the work of all departments to insure that they are adequately fulfilling their responsibilities to each individual ship contract.

Carleton Shugg, Electric Boat president, said the new department was set up as "another step toward helping the shipyard achieve the lower costs necessary to obtain more contract awards under competitive bidding and to maintain the work load."

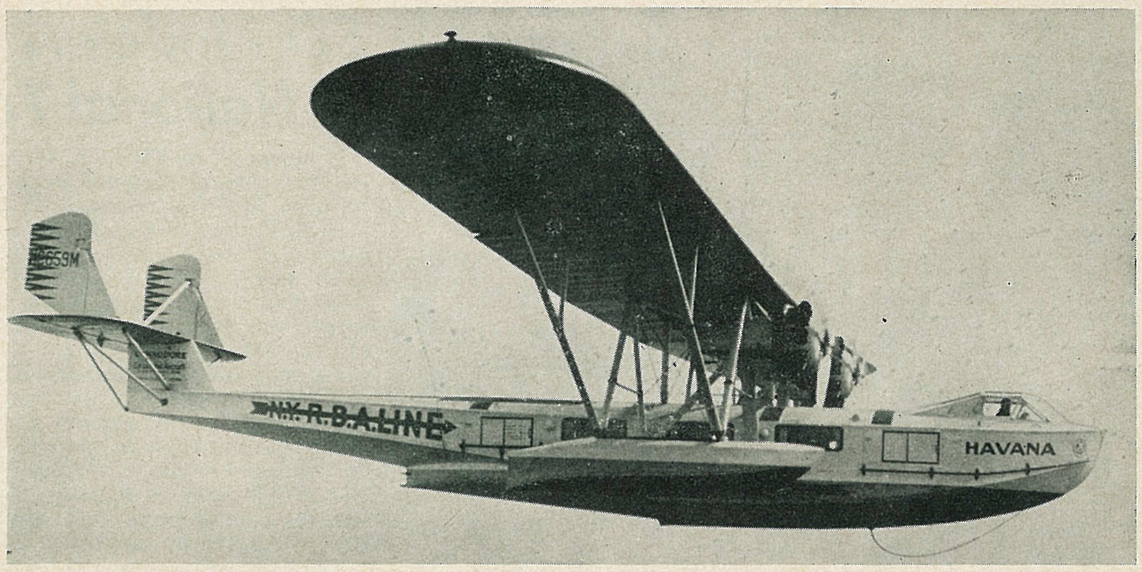
Extended Range Seen for Atlas

NEW YORK CITY—General Dynamics Corporation's semi-annual report to share owners dated Aug. 10 included this report concerning the Atlas missile:

On July 21 an Atlas missile with a new type nose cone was fired 5,000 statute miles, impacting on the target area. On July 28, an Atlas "D" missile was fired the programmed 5,000 miles. The USAF has said that the range of the Atlas "can be greatly extended beyond the nominal 6,300 statute miles usually quoted."



"Don't let it worry you . . . SOMEwhere, SOMEhow, SOMEbody will come up with a miracle drug in time to do you some good."



MONEY MAKER—This was Commodore flying boat built by Consolidated that flew Nyrba line routes back in 1930. Line was later bought by Pan American.

Consolidated Benefited by Airline Order

(This is installment No. 15 in Convairiety's continuing history of Convair Division of General Dynamics Corporation. So far, it has dealt with early years of Consolidated Aircraft.)

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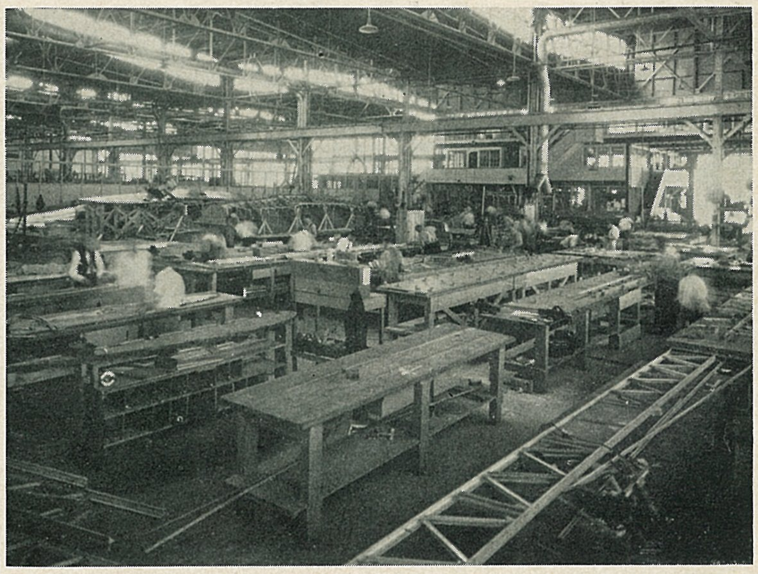
President Reuben Fleet's promotion of Nyrba (New York, Rio de Janeiro, Buenos Aires), new airline link with South America, had a beneficial effect upon Consolidated Aircraft, as he had anticipated. This was the manufacture of a number of flying boats called Commodores.

While Pan American Airways was pushing its service down the west coast of South America, Nyrba worked both ways from its southern terminus. Buenos Aires was linked to Santiago, Chile, with tri-motored Fords in September, 1929, and to Rio de Janeiro with Commodores by winter of that year. The line had four Commodores in use by January, 1930 (with ten on order) and was using 13 smaller transports for feeder routes.

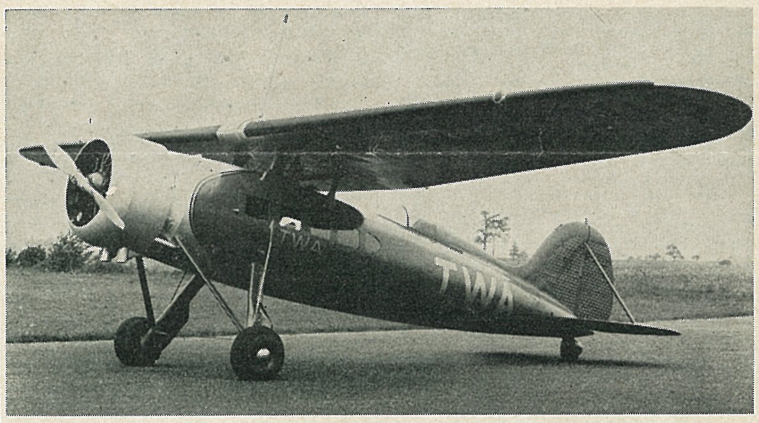
During the spring and summer of that year several forces worked to bring about the sale of Nyrba to Pan American. Depression, which followed the October stock market crash, was ending the boom; Argentina reneged on its exclusive mail contract with Nyrba; and in government and business circles it was being argued that a single strong American operator could best meet the competition offered by French and German airlines. Juan Trippe, Pan American president, announced the purchase of Nyrba through a $4 million stock transfer on Aug. 31, 1930.

Nyrba had put Consolidated firmly in business as a manufacturer of flying boats, and Fleet could boast in 1934 that "Commodores have flown more than four million miles . . . in the four years that they have been the backbone of Pan American's service." Nyrba paid Consolidated $100,000 apiece for the 14 boats, and also bought ten Fleetster transports and 12 two-place trainers. Consolidated's profits came to $208,000, and Fleet personally wound up with a sizable block of Pan American stock.

Consolidated's second new plane in 1929 was an eight-passenger cabin monoplane, the Fleetster. It was notable as the first U.S. transport to have all-metal monocoque fuselage. Metal techniques developed in constructing flying boat hulls were used and the plane emerged as a sleek, smooth-skinned transport of ultra modern appearance. Nyrba used the first ships in South America. Transcontinental and Western Air bought six, and Ludington Air Lines used some on its New York-Washington route (where the slogan was a flight "every hour, on the hour"). In July 1929 the press reported that F. Trubee Davison, Assistant Secretary of War for air, would make a 10,000-mile inspection trip "in the Army's latest and fastest transport plane, a Hornet-powered Fleetster . . . piloted by Capt. Ira C. Eaker."



FACTORY SCENE—Manufacture of Commodores was profitable business for Consolidated, as well as building Fleetsters, eight-passenger land planes.



FLEETSTER—This plane (with TWA markings) was first U. S. transport to have all-metal monocoque fuselage.

Five F-106As 'Shoot Down' F-102s In Simulated Combat Mission

Five Convair-built F-106As took part in a simulated combat intercept mission for the first time late last month with all targets found and destroyed ten minutes after takeoff.

Pilots of the 498th Fighter-Interceptor Squadron at Geiger Field, Spokane, Wash., were the first fighter unit in air defense history to employ the latest Convair all-weather interceptors in such an exercise.

During the recent Western Air Defense Force mission involving Geiger's 4700th Air Defense Wing, five of the 498th FIS's new interceptors were scrambled after F-102As, also Convair planes, as they attempted to penetrate the Spokane area.

Pilots of the F-106s claimed that all targets were found and "destroyed" while at least 75 miles from the city's perimeter and all were intercepted within ten minutes after F-106 takeoffs.

Maj. Thomas J. Cribbs, operations officer of the 498th and one of the five F-106A pilots, remarked enthusiastically about the plane's operational capabilities, "I had unlimited thrust at my disposal and only used half or less."

The scramble took place just 14 days after the 498th officially received its first F-106A aircraft. The squadron was not committed to be on an alert status until 75 days after receiving its 11th F-106A, some time in the future.

T. S. Vaughan, Convair SD field representative at the Spokane base, said Col. Leon W. Gray, 4700th wing commander, credited the outstanding performance of the 84th Consolidated Aircraft Maintenance Squadron for making the scramble possible.

In his commendation to Lt. Col. Richard A. Williams, 84th CAMRON commander, Colonel Gray commented, "The all-out effort exerted by you and your personnel in getting the F-106s operational yesterday is outstanding . . . Once again you have proved that the 84th CAMRON is an organization with an intense desire to do a damn good job."

The 498th FIS, one of the first units in the nation to receive the new Convair jets, is at present about 50 per cent converted from F-102s to F-106s.

First USAF base to get F-106s, called the world's fastest and highest-flying all-weather interceptors, was McGuire Air Force Base, N. J., where F-106As and Bs went on duty for training in June.

Krushchev Invited To Visit San Diego

Soviet Premier Nikita Krushchev has been invited by Mayor Charles Dail to come to San Diego, "home of the F-106, the jet 880 and the Atlas missile," on his proposed trip to the U.S.

Dail's invitation to include San Diego on the premier's itinerary is under consideration by the State Department.



TOP DIVERS—Winner of "Diver of Year" award at Convair SD, Chuck Nicklin (second from right), receives trophy from Tom Richardson, CRA commissioner. At far left and right are runners-up for award, Bob Casebolt and Allen Jones.

Movies on Atlas Missile and 880 Available for Public Shows

Over 100 motion picture films, ranging in subject from Pogo and Sea Dart to 880 flights and Atlas firings, can now be obtained free of charge for group and private showing by all Convair SD folk.

H. C. Pineau, film librarian of Convair SD's motion picture section of the photographic department, said last week that all unclassified films are available on a two-week loan basis, simply by calling the motion picture department and reserving the film.

"Showings of classified films, naturally, are limited to in-plant use," Pineau said. "Departments and other groups who wish to obtain a classified film must present an AVO signed by their supervisors or department heads."

Of the movies available for general viewing, most deal with Convair products and techniques. Ninety per cent are in color and sound. They vary in length from three to 30 minutes. The great majority have been produced by the SD motion picture section which right now has 30 films in production.

"Along the same line," Pineau added, "we are constantly adding new films to the library and many are there for the public to use. A series of 13 films dealing with 'great men in science' right now averages roughly 30 requests per month from military organizations, colleges and scientific groups all over the country."

These films (also produced by the SD motion picture section) include such world famous scientists as Dr. Edward Teller giving a classroom discussion on "Nuclear Forces," and Dr. George Gamow lecturing on the "Theory of Relativity." These films are in black and white and vary in length from 50-60 minutes.

Pineau said the film library can usually fill reasonable requests for films that have been produced by other industrial and private motion picture groups. They are, for the most part, scientific, technical and educational and are obtained on a cooperative basis.

If possible, films stocked by the library should be ordered two weeks in advance. Films that must be sent away for will usually require additional notice. Reservations and additional information can be obtained by contacting Pineau, ext. 1674, Plant 1. The motion picture section is located on the fourth floor of Bldg. 19, Room 400.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Aug. 16 through Aug. 31.

Twenty-five year: Dept. 34-1, W. N. Liddle; Dept. 135, Joseph Drozdz; Dept. 292, V. F. Cernuto.

Twenty-year: Dept. 61-0, J. E. Quigley; Dept. 402-1, C. E. Jones.

Fifteen-year: Dept. 1-51, Gloria Copeland; Dept. 1-71, C. L. Blake; Dept. 3-3, Jeanette Kupersavage; Dept. 14-1, M. W. Rhea; Dept. 15-5, R. R. Reinagel.

Dept. 25-2, Alma W. Marshall; Dept. 31, C. O. Clark; Dept. 101, Gladys P. Story; Dept. 115, B. H. Johnson; Dept. 137, H. G. Deweese; Dept. 230, E. J. Helzer; Dept. 600-2, George Radici.

Ten-year: Dept. 6-51, J. L. Jonte; Dept. 8-6, D. A. Montgomery; Dept. 14-4, Louise M. Weeber; Dept. 15-6, A. E. Nussbaumer, Matthew Sletnar; Dept. 25-1, L. J. Renz; Dept. 31, John Fuller, L. E. Sills.

Dept. 44-1, Deborah V. Bedgood, Earnesteen W. Swaine; Dept. 95-3, O. V. Pratt; Dept. 123-0, A. F. Nobrega; Dept. 135, R. C. Brown; Dept. 146, L. J. Arsenault.

Dept. 180-0, J. L. Soares; Dept. 188, R. R. Chilcote, C. T. Peterson, H. C. Stephens; Dept. 218, Mary K. McDonald, Lorena M. Story, R. H. Swadley, Elsie R. Wagner; Dept. 280, E. Q. Burger, Queena Q. Poe; Dept. 288-5, Nora M. Barham, B. G. Kratz.

Promotions

SAN DIEGO

Promotions to or within supervision effective Aug. 3.

Dept. 6-70, Engineering: To asst. research group engineer, S. Molnar. To asst. foreman, D. C. Newlon.

Dept. 15, Customer Service: To service publications supervisor, B. H. Michael. To parts catalogue asst. supervisor, J. R. Cash.

Dept. 95-0, Estimating: To budget supervisor, R. D. Evans.

Dept. 180, Proofing Mockup: To asst. foreman, D. G. Cobb.

Dept. 218, Sub-Assembly: To asst. foreman, D. E. January, R. L. Long.

Dept. 223, Welding: To asst. foreman, R. L. Kercher.

Dept. 292-1, Manufacturing Control: To M/C asst. foreman, K. R. Farnsworth, C. G. Stevenson.

Personals

SAN DIEGO

We wish to express our deepest appreciation to all of Willard's friends and associates.

Marie and David Luppke

* * *

We wish to express our sincere thanks to Dept. 603 friends for the acts of kindness, cards of sympathy and floral tributes at the time we lost our husband and father, Don Gantner.

Mrs. Don Gantner and family.

Retirements

SAN DIEGO

MILLER—Ernest, Dept. 3-1. Seniority date Dec. 12, 1941, retirement effective Aug. 4, 1959.

VICTOR—Lee T., Dept. 6-51. Seniority date Oct. 4, 1950, retirement effective June 19, 1959.

Births

SAN DIEGO

CHAPMAN—Son, Patrick Anthony, 6 lbs., born July 14 to Mr. and Mrs. J. L. Chapman, Dept. 603-1.

CHENELLE — Daughter, Michele, 7 lbs., 9 oz., born Aug. 6 to Mr. and Mrs. F. W. Chenelle, Dept. 603-3.

DICKENS — Son, Walter Edward, 6 lbs., 14½ oz., born July 31 to Mr. and Mrs. R. D. Dickens, Dept. 6-70.

FORD—Son, Kenneth Alvan, 8 lbs., 12 oz., born Aug. 1 to Mr. and Mrs. C. R. Ford.

LOWE—Son, John Stuart, 6 lbs., 11 oz., born Aug. 2 to Mr. and Mrs. W. S. Lowe, Dept. 6.

Deaths

SAN DIEGO

HERBERT — Joshua, Dept. 401. Died Aug. 9. Survived by wife, Mercedes; daughter, Mrs. Elsie Harper; two sons, Richard and William J.; two sisters; four brothers.

Tickets for Tonight's Ball Game Available

Discount tickets to the Padres home ball game tonight (Aug. 19) are available at Convair San Diego employee services. When exchanged at the Westgate Park box office, reserved seats can be purchased for $1.25 and general admission for 50 cents. Tickets to the Sept. 2 game will be available two days before that date.

CONVAIR DAUGHTER DIVING CHAMPION

Janet Olson, 13-year-old daughter of R. N. Olson (SD Dept. 6), won the low board diving championship in her age bracket July 19 at the San Diego junior olympic meet held at the municipal pool in National City. Last year she won the same event for 12-year-olds.

SPACE PRIMER SUPPLY UPPED

A new supply of Space Primers is now on hand at Convair San Diego employee services. The booklets, introductions to the science of astronautics, may be purchased for 10 cents each.

SD Modelers Fly High In National Tourney

Members of the SD CRA Aeromodelers who participated in the National Model Airplane Championships last month at Los Alamitos NAS won a raft of individual honors.

Leading the team in the victory parade was Walt Mooney (Dept. 6) who piled up 117 points to win first place in the scale model free flight event. In addition, Mooney won a third place in the Pan American Airways-sponsored "PAA-load" event. His third-place flight was 10 minutes, 28 seconds (the winning time was 10 minutes and 30 seconds)!

Another Dept. 6 man, Charles Primbs, placed second in the hand-launched glider event; fourth in the unlimited rubber event; and fifth in the ½A free flight gas class. In the latter, Primbs succeeded in making the three qualifying flights in perfect form. But he then lost the model before the tie-breaking event.

Nat Antonioli was another team member who received a medal for his fifth-place finish in the Nordic glider event. Gary Witt, team captain, placed ninth in the "PAA-load" event.

Members made a good showing, participating in 15 of the 38 events sponsored by the Academy of Aeronautics. More than 100 official flights were tallied by the club.

Gary Witt, club spokesman, said the group intends to hold an outdoor hand-launched glider contest Aug. 23 at the Clairemont Mesa Drive location. Prizes will be awarded through third place in the 8:30-11:30 a.m. competition.

Tom Frye, Top Gun Handler, To Put on Exhibition at SD

"Seeing is believing" but Convair SD and Astro folk will be doubting their eyes when Tom Frye, one of America's fastest gun handlers, puts on a shooting exhibition Aug. 29 at Gillespie Field.

Jack Swank, commissioner, said the exhibition will be free and that all Convair personnel interested in seeing a spectacular demonstration are invited to attend.

The performance is being featured as one of the attractions of the Fiesta del Pacifico.

The Remington gun handler will start the show at 2:30 p.m. Using an arsenal of rifles and shotguns, Frye will show off all the feats that have gained him a nationwide reputation as one of the best gun handlers in the business.

Frye is a shooter of the same skill as the late Herb Parsons who astounded a Convair audience with a similar demonstration in February. Throwing a 2¼-inch maple block into the air, cracking the block and splintering the pieces with four bullets in three seconds was one of Parson's best known feats.

Ice Skating Starts Sept. 3 at Iceland For Convair People

Sept. 3 will be the first ice skating session for Convair SD folk at the new Iceland, 6055 Lake Murray Blvd.

Bud Davies, commissioner, asked all skaters to take note of the change in dates. "We had previously scheduled our first session at the rink on Aug. 20," Davies said. "However, we have been notified only this week that the rink will not be available until September."

After Sept. 3 the private sessions will be held every Thursday, 6:30 to 10 p.m. The public will be admitted and general prices will prevail after 8 p.m. Special rates for Convair folk between 6:30-8 p.m. are 75¢ for adults; 50¢ for children; 25¢ for spectators and 35¢ for skate rentals.

Bud Davies, CRA commissioner, said Iceland is a full-size rink, 60x120 feet, offering programmed skating sessions, individual and group instruction.

Interest in Spanish Class Keeps Growing

Response to CRA's announcement of a Spanish class, emphasizing a working knowledge of the language, is growing bigger and bigger.

Sixty-five showed up for the organizational meeting early this month. Present plans call for splitting the group into two classes, a beginners and an advanced. There is a possibility, if the group grows too large, that a third class will be formed.

Date for the first beginners class is Sept. 3. The advanced group will meet on Sept. 14. Locations will be announced in the Sept. 2 issue of **Convairiety.**

SD Eagles Sweep Convair Tourney

The Convair SD Eagles swept two games to win the all-Convair softball tournament at Jane Reynolds Park in Lancaster Aug. 1.

With Bob Miller on the mound, SD thumped Convair Pomona 16-7 and dropped Antelope Valley 5-1.

280 Game Sparks High Keg Series

Harold B. Stevens (Dept. 21-1) has set quite a record for bowlers at Convair SD to shoot at.

He recently rolled a 693 series, sparked by a 280 game! Stevens is a member of the Happy Hour team bowling at Pacific Recreation.

Fiesta Gun Shoot Set by SD, Astro

The annual Fiesta del Pacifico Gun Shoot will be sponsored jointly by the Convair SD and Astro Gun Clubs starting at 10 a.m. Aug. 30 at Gillespie Field.

The shoot, which is included as one of the attractions of the Fiesta, will be a registered ATA event and give contestants a chance to record targets under the auspices of the American Trapshooting Association.

Ezra Johnson, chairman, said shooters from as far away as Arizona and the Imperial Valley are expected to compete. Some events will be handicapped, giving both the experienced and novice shooters an even chance.

Included will be 100 16-yd. targets, 100 handicap targets and 25 pairs of doubles. Awards of silver service will be given in all classes.

Members are reminded that because of the dove season during September the club will not hold the monthly shoot on Sept. 6.

Two Pistol Events Swept by Broadway

B. L. Broadway (Dept. 603) swept honors in both the police course and short nationals to pace shooters in the CRA Pistol Club meet on Aug. 9.

Tallying 293 points in the police event, Broadway finished six points ahead of Ralph Picard (Dept. 6), who placed second. In the short nationals Broadway notched 276 points for first place. Runner-up in the event was Joe Williamson (Dept. 401).

In the expert class, W. G. Walker (Dept. 6) registered 288 points for top honors and Carl Hornburg (Dept. 166) placed second with 279. Top sharpshooters were Harvey Ingalls (Dept. 6) and R. G. Lair (Dept. 406) with respective scores of 260 and 243.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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AEROMODELERS — Hand-launched glider contest Aug. 23 at Clairemont Mesa Field, 8:30-11:30 a.m.

ARCHERY — Meeting tomorrow (Aug. 20), 7:30 p.m., Astro executive dining room.

BADMINTON — Open play for families 7:30 p.m. Tuesday evenings in Federal Bldg., Balboa Park.

BOWLING — Reservations now open for fall and winter leagues. Contact Jim Hayman, ext. 1155, Plant 1; or Mike Brooks, ext. 720, Plant 2.

BRIDGE CLUB — Next session Sept. 1, 7:30 p.m., Barcelona Hotel, 4th and Juniper.

FISHING CLUB—Boats needed for CRA Junior Fishing Derby. Contact W. T. Toon, ext. 411, Plant 1.

GOLF — Entries open today (Aug. 19) for annual CRA match play championships Sept. 12, 19 and 26 at Flying Hills. To register call ext. 1705, Plant 1. GOLF CLUB: Partner's Best Ball Tourney Aug. 22-23 at Torrey Pines.

GUN CLUB — Shooting exhibition by Tom Frye, 2:30 p.m., Aug. 29 at Gillespie Field. Registered ATA shoot starts 10 a.m., Aug. 30, also at Gillespie.

ICE SKATING—First Convair night Sept. 3. Special discount rates from 6:30-8 p.m. at Iceland, 6055 Lake Murray Blvd.

JEEP CLUB—Quarterly meeting tonight (Aug. 19), 7:30 p.m., Civil Defense Headquarters, Gillespie Field.

JUDO—Workouts and instruction every Thursday at 7 p.m., CRA Clubhouse on Pacific Hwy.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Aug. 25—"Jubal," and "Blaze of Noon." Admission: adults, 25¢ children, 15¢.

RADIO CLUB — Meeting at 7:30 p.m. tomorrow (Aug. 20) at Harbor Drive Headquarters.

SOLO FLYERS — Commercial ground school course Tuesdays and Thursdays 7-9:30 p.m., Jim's Air Service, Lindbergh Field. Link Trainer instruction now available. Contact Ken Condra, ext. 2770, Plant 1.

SPANISH CLASS — Dates for first classes are Sept. 3 for beginners and Sept. 14 for advanced. Meeting place will be announced in next issue of **Convairiety.**

SPORTS CAR CLUB—Meeting tonight (Aug. 19), 7:30 p.m., Natural History Museum, Balboa Park.

SQUARE DANCING — Hawaiian luau square dance starts 6:30 p.m. with potluck dinner Aug. 22 at University Heights Community Center, 4044 Idaho St. Intermediate graduation 8 p.m., Aug. 24, American Legion Hall, 4061 Fairmount Ave.

SWIMMING — Free family swim night Sept. 5, Mission Beach Plunge, 7-9:30 p.m. Tickets available Aug. 31, employee services, both plants, and from departmental representatives.

WATER SKIING — Picnic and meeting after work Sept. 1 at Pecan Park. Breakfast and skiing starting at 7 a.m., Sept. 7, Gleason Point, Mission Bay.

Westgate 'Theater' Tickets on Sale

Convair San Diego people may see the Fiesta del Pacifico musical extravaganza next month at Westgate Park's "theater under the stars" at discount prices.

Tickets for the Sept. 12 performance of Johnny Green's "Stars Over the Pacific," musical galaxy starring Peggy Lee, will go on sale at San Diego employee services outlets next Monday (Aug. 24) at 9 a.m.

CRA reduction in price will amount to a saving of 50 cents on any seat. Discount prices range from $3.50 for loge seats to $2 for any reserved seat.



RIDERS HOLIDAY—Over 600 were entered in Convair SD's Horse Show July 26. Another 1800 were on hand to watch the all-day event.

Over 600 Enter SD Horse Show

Convair SD's second Horse Show of the year July 26 attracted over 600 entries and three times that many spectators, C. L. Pogorel, commissioner, reported.

"It was one of the most successful shows ever ventured by the Riding Club," Pogorel added. "Fast-moving events which started at 9 a.m. ran well into the late afternoon. Nearly all classes were filled to capacity," he said.

Riders were entered from all around the Southern California area. Winners in the children's classes included Fay Latson, Linda Kibbee, Sandra Fleet, Carolyn Waller, Bana Rullo, Sandy Schmiedel, Bob Rowan, Pamela Conant, Diane Boney, Carole Hauseur and Bob Hauseur.

During the afternoon adult amateur and open competitions Jarvis Esenwein took honors in the Hunters class; Champ Hough won the Jumpers; Linda Randall, the Trail Horse; Barbara Hambsch, English Pleasure; E. R. Stong, Western Pleasure; Mrs. O. B. Davey, three-gaited horse; and Susan Fleet, five-gaited horse.

Volkswagen Wins Club 'Field Day'

A modified Volkswagen, driven by Mike Morgan, placed first overall to head a field of 104 cars entered in the Convair SD Sports Car Club's national council championship event Aug. 9.

The slalom proved the most popular of the four-event "Field Day" with 95 cars participating.

In a preview of the "Field Day," held the weekend previous, Convair SD club members were paced by Bob Bauer with Skip Carpenter second and Barrie Freeman third.

Next meeting will be held tonight (Aug. 19) at 7:30 p.m. in the Natural History Museum, Balboa Park.

Registration Opens Today For CRA Golf

A large turnout is expected to enter the annual San Diego CRA match play golf championships next month, Ken Wulfemeyer, commissioner, reports.

Entries open today (Aug. 19) for the 54-hole tourney which will be played Sept. 12, 19, and 26 over the Flying Hills course. Registrations, which can be placed by calling ext. 1705, Plant 1, close on Sept. 2.

The tourney last year attracted 108 golfers and a similar turnout is expected at this year's event, Wulfemeyer said.

Results of the CRA sweeps held Aug. 8-9 at Circle R saw Bob Dodson (Dept. 31) and Ralph Way (Dept. 400) tie for first place low gross honors with 72s. Low net winners in the 0-15 handicap division were Andy Simington Jr. (Dept. 292) and Mike Luban (Dept. 31). They tallied scores of 61 and 63 respectively.

In the 16-21 handicap group Tom Potts (Dept. 400) paced entries with a low gross of 81, followed by Ken Holly (Dept. 14) with 83. Tieing for low net with 65s were Jim Pollpeter (Dept. 31) and Lee Baker (Dept. 603).

Leading the 22 and over handicap group was Jim Flitters (Dept. 15) with a low gross of 80. Lee Woll (Dept. 3) chalked up 89, good for second place. Low net leaders were B. Bludworth (Dept. 31) with 62 and Tony Taranto (Dept. 603) who handicapped a 65.

Graduation, Luau Square Dance Set By SD Hoedowners

The second annual Hawaiian Luau Square Dance and intermediate class graduation will highlight Convair SD Hoedowner activities during the next week.

P. E. Liggett, commissioner, said the luau and dance will start with a potluck dinner at 6:30 p.m., followed by dancing at 8, next Saturday (Aug. 22). Van Vander Walker and Bob Daugherty will call for the dance at the University Heights Community Center, 4044 Idaho St.

Hawaiian costumes are in order for the affair, Liggett added.

Forty dancers will be graduated from the intermediate class at 8 p.m. on Aug. 24 at the American Legion Hall, 4061 Fairmount Ave. Thereafter they will join the advanced group which meets at the University Heights location. The next dance scheduled there is on Sept. 1.

Liggett said there will not be any beginner or intermediate classes during September at the American Legion Hall. The new schedule will first go into effect in October.

Star-Light Tickets On Sale Tomorrow

Going on sale tomorrow (Aug. 20) at 9 a.m. at Convair San Diego employee services, Plants 1 and 2, will be reduced-price tickets for the last Star-Light Opera musical.

Convair SD theater-goers may purchase tickets to "Bells Are Ringing," for $2.10 for regular $3 seats and $1.75 for $2.25 seats. Convair night is scheduled for Sept. 6.

Tickets are still on sale to the Aug. 23 performance of "Naughty Marietta."

Pine Valley Outing Attracts 55 Riders

Fifty-five members of the Convair SD Riding Club enjoyed a steak fry and trail ride in Pine Valley on Aug. 1, C. L. Pogorel, commissioner, reported.

Pogorel said the ride was held in conjunction with the Pine Valley Horse Show at which the Convair SD color guard participated, winning an award for their performance. Many members of the CRA group camped out overnight.



TOP SWINGERS—Convair SD's Dept. 31 softball team last week joined ranks of league winners, taking first in San Diego Swing Shift League. They amassed record of 14 wins without a loss to cop championship. Listening to coach Joe Arnieri (on left) are (bottom row, from left): Bob Riverоll, Phil Estrada, Luis Campos, J. G. Jacobo, and Bob Inscore. Top row (from left): R. Gordon, W. D. Trepanier, Juan M. Tanou, Jim Blackwell, Waldo Coyle, Herb Livermore and Don Williams.

CRA Sports & Recreation Convairiety

SD, Astro Model Railroaders Help Host National Convention

A group of model railroaders from Convair SD and Astro will be taking turns starting tomorrow (Aug. 20) steering the four-day convention of the National Model Railroad Association down the track.

Eleven members of the CRA Model Railroad Club, an affiliate of the San Diego Model Railroad Club, are handling important committee responsibilities as San Diego hosts the national convention Aug. 20-23.

Heading the group is Karl P. Busch (SD Dept. 15) who is general chairman. Members of his staff include K. V. Lawson (SD), publicity; H. D. Fyffe (Astro), special events; G. C. French (SD), home layout visits; E. L. Mehrlust (Astro), manufacturer's exhibits; C. D. Taylor (Astro), finance; M. C. Brogan (Astro), souvenirs; G. Overlin (SD), photography; E. H. Davies (SD), layout operation; G. C. Walsh (SD), banquet; and D. H. Kahler (SD), general manager.

During the convention, delegates will visit the club in Balboa Park as well as the Pacific Beach Model Railroad Club at Del Mar Fairgrounds, Chula Vista Model Railroad Club, and layouts of individual members.

Construction and operation contests will be held and awards presented. K. V. Lawson, publicity chairman, said because of the large membership attendance expected the public will not be admitted, except by registration, to the layout room in Balboa Park.

However, Convair folk are invited to the location at any other time when the club holds scheduled events, Lawson added. They are held on the first, third and fourth Fridays at 8 p.m. The model railroad operations can also be seen on Saturdays, between 1 and 4:30 p.m.

SAFETY WEEK STARTS AT CAR CLUB EVENT

Sports Car Safety Week (Aug. 9-15) was kicked off at the Field Day sponsored by the Convair SD Sports Car Club Aug. 9 at the Astro parking lot. Participants had cars safety-checked prior to competing in any of the events at one of the four check stations.

Archers May Hold Instruction Class

With a number of requests already received, Convair SD's Archery Club is trying to determine just how much interest there is in an archery instruction class.

Al Phipps, club spokesman, said the group is willing to hold a class on shooting, the type of equipment to buy and where to buy it, etc., if enough people enroll to make it worthwhile.

Anyone interested in a course of this type should contact employee services, ext. 1245, Plant 1, Phipps said.

Members will meet tomorrow night (Aug. 20) at 7:30 p.m. in the Astro executive dining room.

Results of a shoot on Aug. 9 saw Al Stone (Astro) place first and Al Phipps (SD) second. Winners in the Little Beaver class (over 10) were Kenny Bangsberg and (under 10) Doug Beary.

Full Slate Ahead For Ski Activities

Water skiers at Convair SD have planned a busy schedule of events during the next month both on and off the water.

In addition to the regular weekend outings on Tierra del Fuego, Mission Bay, T. E. Mathews, commissioner, reported the club will stage a combination family picnic and meeting at Pecan Park Sept. 1. It will start as soon as members can get there after work.

On Sept. 7 (Labor Day) the group will meet at 7 a.m. at Gleason Point on Mission Bay for water skiing and breakfast.

More information can be obtained by contacting Gene Sevigny, commodore, BR-3-0828 or ext. 1032, Plant 1.

Dept. 31 Wins Swing Shift Championship

Another softball team joined the championship ranks at Convair SD last week when Dept. 31 cinched first place in the San Diego Swing Shift League.

They went undefeated during regular league activity, racking up 14 straight wins behind the pitching of Jim Blackwell. Growing steadily stronger as they progressed, Blackwell climaxed the season by throwing two no-hit ball games.

The Astro swing shift team, however, managed to push a run across in the first inning when three infield pop-ups were dropped by a shaky defense. Other Dept. 31 victories included a 22-0 rout of the Toppers and 11-0 whitewash of another Convair SD team, Dept. 280.

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The Convair "A" team nailed down first place in the San Diego AAA League officially last week in spectacular fashion with pitcher Art Bunge twirling a no-hit, no-run ball game at the Convair Eagles.

Facing only 22 Eagles, Bunge allowed only one man to reach second. Bunge and Eagles' pitcher Bob Miller were locked in one of their customary duels until the sixth inning when Bunge helped his own cause by slapping a double to right to open the gate for the first run of the game. The final score was 3-0.

Final league statistics showed the first-place "A" team with a record of 18 and 2. The second-place Eagles ended up 16 and 4. The "A" team suffered its second defeat two weeks ago when Anderson's Furniture dealt them a 3-0 loss. The upset broke a 17-game winning streak for both the team and pitcher Bunge.

Gil Crosthwaite, commissioner, said the Eagles have been entered in both the SCMAF softball tourney and the ASA district meet which started Aug. 17.

SD, Astro Boat Owners Needed To Make Fishing Derby Success

More boats are still needed to make the CRA Junior Fishing Derby a success, W. T. Toon, acting chairman, reports.

"We're asking boat owners at Convair SD and Astro to volunteer their craft and services on Aug. 29 to insure the success of the derby," Toon said.

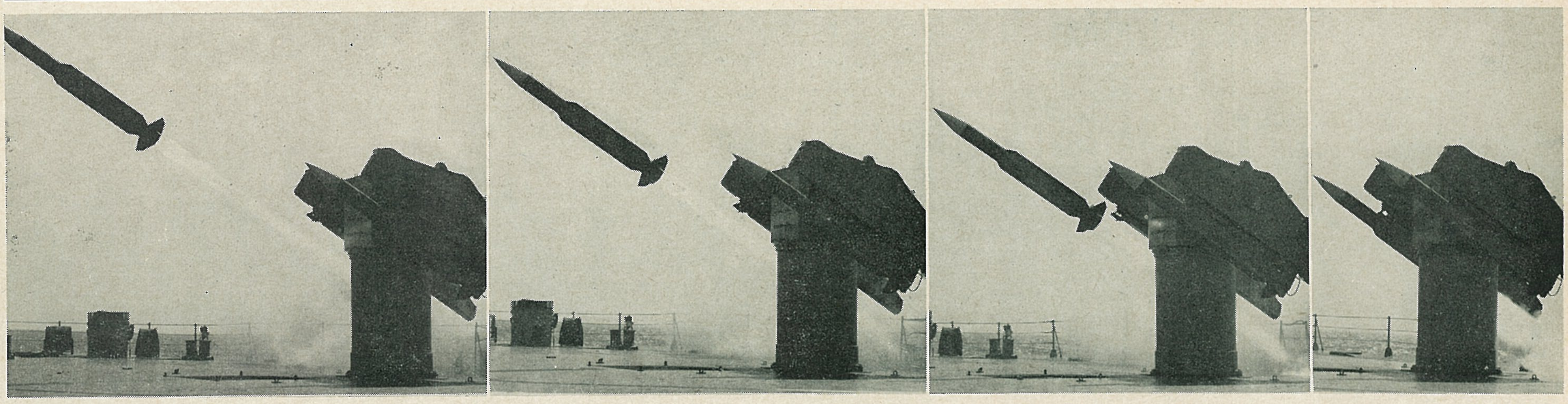
Sponsored annually by CRA in conjunction with the Pacific Beach Town Council, underprivileged boys and girls, between 9 and 15, are treated to a full day of fishing.

Boat owners, as in the past, will be expected to supply tackle, bait, insurance and life jackets. However, Toon said extra life jackets would be available at the site on derby day.

Approximately 15 flotilla captains at SD and Astro have been appointed. They are being asked to contact boat owners and enlist their services for the derby. Prizes and refreshments for the youngsters will be furnished by CRA.

The present schedule of events on Aug. 29 calls for departure at 6:30 a.m., fishing from 7 a.m. to 1 p.m., followed by the awarding of prizes and serving of refreshments.

Full details, including a map of the bay, regulations, safety instructions, etc., will be furnished all volunteer boat owners. To register for the derby SD folk should contact Toon, ext. 411, Plant 1.



ZOOM!—First photos of Tartar missile, built at Pomona Division, were released this month. Convair photographers aboard USS Norton Sound off California coast caught this action series. Camera used shoots 20 exposures a second, each at one-3,000th of a second.

15-Foot-Long, Dual Stage Tartar Will Join Fleet By Mid-1960, Says Navy

Tartar, a supersonic guided missile which will be the primary anti-aircraft batteries aboard destroyers and secondary batteries on cruisers, is now in production and will first appear in the fleet in mid-1960, the Navy announced this month.

Convair Pomona Division produces the missile at the U. S. Naval Industrial Reserve Ordnance Plant, Pomona. Tartar was developed by the Bureau of Ordnance under the technical direction of the Applied Physics Laboratory of the Johns Hopkins University, Silver Spring, Md.

The USS Norton Sound in recent months has been test-firing the Tartar missile off the California coast.

"The supersonic Tartar," Rear Adm. Paul D. Stroop, Bureau of Ordnance chief said, "is highly effective against both low and high-altitude targets."

Since space aboard ships is severely limited, the use of miniaturization techniques was required to package the sophisticated guidance, propulsion and construction systems into the small, lightweight airframe of Tartar. The complete missile is about 15 feet long and is slightly over one foot in diameter.

As part of the size-reduction objective, a small-stage, solid-fueled dual-thrust rocket motor was designed and developed by the Aerojet General Corporation, Sacramento, Calif. Normally, a two-stage rocket propulsion system is used in this type of missile, the first stage dropping off after it is expended.

The dual-thrust rocket of Tartar achieves the same result with a single-stage that is an integral part of the missile, Admiral Stroop explained. A high-thrust, short-duration burning period serves to launch and accelerate the missile to supersonic speed. After this, a lower-thrust, longer-duration-burning period maintains this high speed until target interception.

When the missile approaches within range of the target, the warhead is detonated and the force of the warhead explosion destroys the enemy aircraft.

NAVY ORDERS FIVE MORE TARTAR SHIPS ON EAST COAST

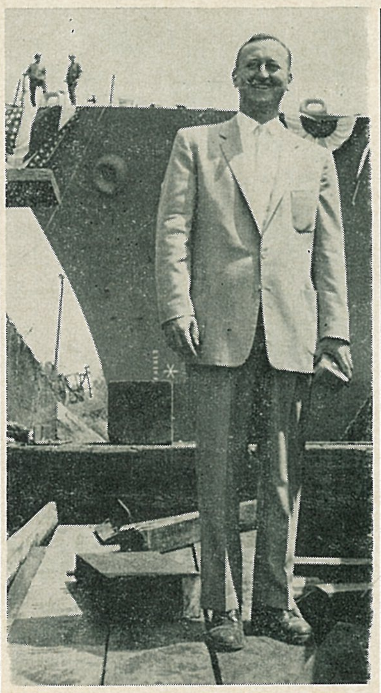
The Navy has ordered the last five of 18 missile destroyers called for under the present shipbuilding program.

All five of the ships are designed to fire the Convair Pomona-built supersonic Tartar guided missile. They will also be equipped with sonar and anti-submarine warfare weapons, the Navy announced.

Tartar is the newest and smallest of the Navy's surface-to-air missiles, with a range of about 10 miles. Its small size allows installation in secondary batteries of larger ships.

The New York Shipbuilding Corp., Camden, N. J., and Avondale Marine Ways Inc., Avondale, La., were awarded the fixed-price contracts. The New York firm will build three of the ships, with the other two scheduled for Avondale.

The new ships will have an overall length of 431 feet with a 47-foot beam, the Navy said.



GUEST—Convair Pomona's J. J. McCormick stands on launching ways shortly after USS Lynde McCormick (DDG-8), Tartar-armed missile destroyer named for his father, was launched July 28 at Defoe Shipbuilding Co., Bay City, Mich. Bow of ship is in background.



SPLASH—USS Lynde McCormick (DDG-8) throws her first wave as she drops off launching ways at Defoe Shipbuilding Co., Bay City, Mich., July 28. Destroyer will be armed with Tartar missiles and latest anti-submarine weapons.

Purified Air Apparatus Adopted For Work in Confined Spaces

Personnel working in confined spaces at Convair SD are breathing easy this week. And what's more important what they're breathing is freshly purified air.

Streamlined, suitcase-size portable respirators, designed for use in areas where space is at a premium, were introduced for the first time last week by the Convair SD safety department.

The new units, Scott Demand Respirators, automatically filter the air, remove water, oil, oil vapors and objectionable odors.

According to Yale Naliboff, SD safety engineer, the danger of air contamination is a safety problem in small confined areas, especially those where solvents are used to accomplish the job.

Sometimes the spaces are so small there is hardly room enough for the person to do the job, much less haul in with him bulky respiration apparatus, Naliboff said.

"The new respirator units can solve this problem to a considerable degree," he added. "Only the face mask and attaching hose must be worn by the worker. The filter itself is locked right into the 'suitcase.'"

The units come with two mask styles, one a compact mouth-nose type, the other a full face mask with transparent shield. The respirators are simple to use and can be plugged right into plant air outlets. One unit can supply fresh air for two persons.



BREATHING EASY—John P. Auarjo (SD Dept. 146) uses new respirator while working in 880 wing fuel cell. Danger of fumes is negligible.

Armed Forces College Offers Course on Security Economics

The Industrial College of the Armed Forces this month extended an invitation to qualified Convair men to apply for a graduate level correspondence course on "The Economics of National Security."

The course is based on the curriculum of the 10-month resident course conducted by the college at Fort Lesley J. McNair, Washington, D. C. for selected senior officers of the military services and executives of the civilian agencies of the government.

Operating under the Joint Chiefs of Staff, the Industrial College is unique among military colleges of the world in that it studies the economic readiness of nations and blocks of nations to wage war, and analyzes the economic, military, political and psychological factors as they relate to the national security.

The correspondence course portrays the interdependence of the economic and military structures. The text material is presented in 22 bound volumes of about 85 pages each, and is organized into five units of study. Members of the faculty review each test paper submitted and are available to answer individual questions. The entire course takes about one year to complete.

Since the course was first formulated in 1950, it has been repeatedly modified to reflect the changes in the world situation. Today over 3,600 are enrolled in the course.

Civilians who successfully complete the course receive a certificate of completion. Reserve officers not on extended active duty are granted 48 credit points. There is no charge for the course.

Personnel interested in taking the course are urged to apply to the Commandant, Industrial College of the Armed Forces, Washington 25, D. C., Attn: Correspondence Branch.

Navy Unit Seeking Reserve Officers

Naval Reserve officers in the San Diego area are being sought for affiliation with Naval Reserve Composite Company 11-1 which meets at 7:30 p.m. each Wednesday at the Navy Reserve Training Center.

H. O. Brooks, a reserve commander, is executive officer of the company. He may be reached at ext. 2296 at Astronautics or at AC-3-7292 evenings.

13 Years Part Time Study Wins Degree

Thirteen years of work at Texas Christian University will pay off for Convair Fort Worth's S. L. Milson of Dept. 35 who will finally get his long-sought degree at graduation exercises next week.

Milson didn't give up hopes of a college education even while supporting his wife and four youngsters.

Milson, 30, said he's been attending TCU off and on since 1946. The Korean conflict interrupted his plans at one point.

A physical education major, Milson has a minor in science.



TRIAL TRIP—Donald W. Nyrop (center), president of Northwest Airlines, Inc., and chief pilot, Paul A. Soderlind (right), from St. Paul, Minn., get briefing from Don Germeraad, Convair 880 chief test pilot, before recent flight in Convair's new jet transport.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

San Diego EDITION

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Vol. 12, No. 18 Wednesday, September 2, 1959

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.

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Limit of 32 Per Class Set In SD Training

Registration for the fall program of Convair San Diego inplant classes opened yesterday (Sept. 1).

As classes will be limited to 32, all Convair SD people interested in signing for the supplementary classes given for credit through sponsorship of San Diego Junior College are urged to register immediately. For entrance and information contact M. M. Saunders of SD educational services, ext. 491, Bldg. 15, Plant 1.

Classes, which start Sept. 14, are held in the Convair SD plant for convenience of Convair students who attend on their own time. Registration fee of $1.50 will be collected at the first class meetings.

Courses offered and instructors, all Convair SD men, are: Blueprint Reading and Sketching, Arthur T. Barrie; Blueprint Reading Advanced, Warren Newton; Blueprint Reading, E. Johnson; Basic Electronics, instructor to be announced; Intermediate Electronics, Dale Dyer; Advanced Electronics, Newton Grant; Intermediate Algebra, Dale Dyer; Math Review, Elias Margolin; Machine Shop Math, John Bailey; Optical Tooling, Frank E. Sladek; Manufacturing Processes, R. W. Hardy.

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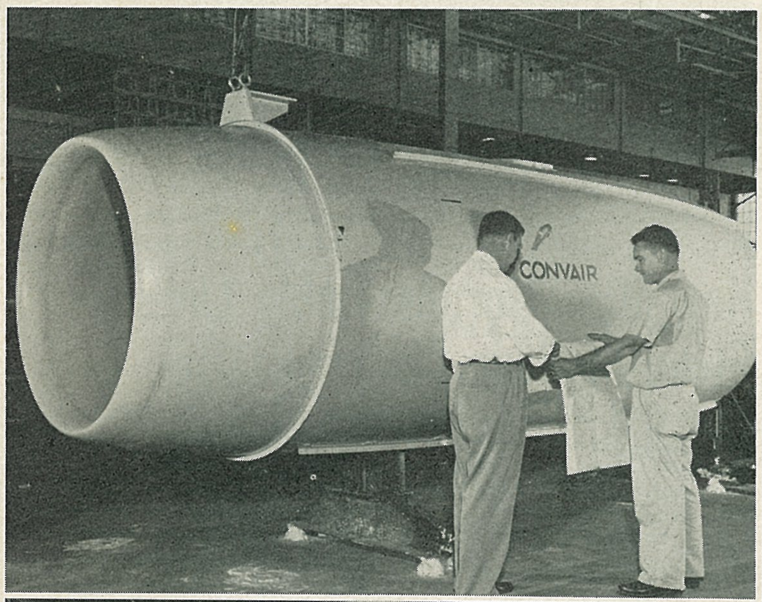
REGISTRATION OPENS FOR ADULT CLASSES

Convair people are reminded that registration is now open for the fall schedule of adult classes which begin Monday (Sept. 14) at San Diego Evening High School, 12th and Russ Sts.

Evening high school classes are open to any person over 18 years of age. All persons planning to work for high school credit should enroll at the beginning of the semester. Information on class schedules may be obtained from the SD Evening High School office, BE-2-7402.

FW Management Club Gets In-Plant Office

Convair Fort Worth Management Club is setting up an inplant office located at Col. 110C on the mezzanine in the educational services section.





POD NO. 1—First power pod for 600, built at SD, is shown in top photo with Willard Martin, Dept. 31 assistant foreman, and B. A. Shourds, experimental mechanic. Below, R. S. Mendoza, also Dept. 31, is inside nose section. Note kidney-shaped ducts on either side that provide increased air flow.

Return to Regular CIP And ES Routine Urged

A complete review and analysis of all proposals submitted during the "RX" campaign is being made before the winner of the $2,000 Grand Award will be announced, E. E. Hartzler, cost reduction supervisor at Convair SD, stated this week.

"This is necessitated because many of the proposals are on a long-term basis and a more than ordinary amount of investigation is required before their exact savings can be determined," Hartzler said.

"However, we hope to announce the winner of the Grand Award next month," Hartzler added.

Since the conclusion of the "RX" campaign all ideas are being funnelled through the Employee Suggestion and Cost Improvement Proposal programs.

"Naturally, we cannot expect to maintain the pace we established during the 'RX' drive but we hope that the campaign has prompted more cost conscious thinking that will become evident in the ES and CIP programs," Hartzler said.

Hartzler urged all suggesters to return to the routine of using CIP-ES boxes in the plant to turn in ideas.

Under the ES program an hourly employee can realize as much as $10,000 on a suggestion put into effect. The minimum award is $10. Awards are paid equal to 10 per cent of the dollar net savings figured over a year's time. If another Convair division adopts the idea, another five per cent will be paid, based on savings at the division.

Awards less than $100 are made in a single payment. Those between $100 and $200 are paid by a $100 first installment and the balance after a six month audit. If the award is over $200, half is paid at once, and the remainder after six months.

Under the CIP program flat-salaried and supervisory personnel can qualify for the annual President's Award. Each candidate who has to his credit savings of over $25,000 is eligible.

'Fall Fashion Carousel' Slated For a Sell-Out

Tickets are going fast for the "Fall Fashion Carousel," first style show for Convair SD women and wives in over a year, said Martha Woodberry, CRA commissioner of women's activities, who predicts that the Sept. 15 show will be a sell-out, with standing room only.

NOTICE!

Due to the tremendous response and demand for tickets, location of the CRA women's activities fashion show has been changed to the Caribbean Room of El Cortez Hotel to accommodate the large number expected to attend.

Convair ladies attending will see a variety of fall fashions of all types and for all ages displayed in a carnival setting. M. M. Saunders of SD educational services is directing details of decor to carry out the carousel theme. Pink and white merry-go-round horses, balloons, and barkers will transport the audience into a world of circus fun.

Models, all from Convair SD, will display styles from La Jolla stores.

Appropriate tunes enlivening the occasion will be played by Bill Appleton of Thearle's Music Co., organist for the evening. Edith Antelline, well known to Convair women as charm school director, will commentate.

Door prizes will be presented under direction of Mrs. Grayce Fath, co-commissioner of CRA women activities, and dessert refreshments will be served.

Hostesses, all members of CRA Women's Activities Auxiliary, will be Fran Leland, AF office; Helen Johnson, (Dept. 2); Mary Martinez (Dept. 100); Margaret Sullivan and Virginia Lopez, both of Dept. 292; Bessie Cooper (Dept. 15); and Molly Dowell (Dept. 3).

Tickets at $1 each are on hand at employee services, both SD plants; Fordham St., office of Bessie Cooper, ext. 100; Rose Canyon, office of Dorothy Kniffen Reed, ext. 2239, or Virginia Cannon, ext. 2125.

First Convair 600 Power Pod Built, Delivered to G.E.

First Convair 600 pod assembly, built in Convair SD experimental department, has been delivered to General Electric Co. for testing at Evendale, Ohio.

The pods are designed to contain General Electric CJ-805-21 engines which will power Convair's high-speed jet transport, sister ship to the Convair 880. Aft fan engines together with an outer ducting system will provide increased thrust — at least one-third more than is possible with the CJ-805-3 engines in the 880. The Convair 600 will have a maximum cruising speed of 635 miles per hour.

Kidney-shaped ducts on either side of the engine provide the aft fan air supply. In the engine itself the turbine blades have been extended outside the basic turbo-jet diameter for compressing air in addition to that flowing through the basic engine.

Addition of the 10-in. wide ducts (large enough for a man to crawl through) around the engine nacelle enlarges the 600 pod to a 5-ft. diameter, approximately half again as wide as the 880 pod.

Pods, pylons, and ducting system were designed by Convair SD engineers to fit the G.E. engine configuration and will be fabricated and assembled in the SD plant when the 600 goes into production.

The test specimen just completed included the nose cowl, engine inlet stub duct, hub fairing, aft fan ducts, aft fan stub ducts, and skins, all bolted on to the pod's outer contour, explained Willard Martin, experimental assistant foreman in charge of construction. Engineer directing the project was V. L. Booth, senior design engineer of propulsion group, assisted by A. D. Mattia, designer.

A follow-on project now in process in experimental is the construction of a second test specimen with a bellmouth and shroud assembly for anti-icing tests to be conducted by General Electric at Hopkins, Minn.

Con-Trib-Club Donations Go To Boys' Clubs

Boys' Clubs in eight San Diego County communities will receive a total of $7,200 as a result of action taken at the last meeting of Convair SD Employees' Con-Trib-Club Committee.

Other contributions voted at the Aug. 19 meeting saw $46,950 in uncommitted funds distributed among philanthropic organizations, mostly for the benefit of the area's young people.

Donations of $600 will go to the Boys' Club in Carlsbad; $1,000, Chula Vista; $1,000, Clairemont; $1,000, Escondido; $1,000, Linda Vista; $1,000, National City; $600, Oceanside; $1,000, San Diego.

Boy Scouts of San Diego County Council will get $5,000; Girl Scouts, $5,500; and Camp Fire Girls, $2,500. Girls' Clubs will get $2,500 for instructors at San Diego and National City.

YWCAs in San Diego and Fletcher Hills will receive a total of $1,200 to be used at SD for Children's Aid Program and equipment and furnishings, and equipment at the Fletcher Hills location.

Encinitas Youth Recreational Committee was voted $500; Alpine Youth Center and Community Park, $750; Cerebral Palsy Foundation of San Diego County, $2,000; San Diego Children's Home Association, $3,500; City of Hope at Duarte, $1,000; Crossroads Foundation, $500; San Diego Society for Crippled Children, $3,500; National Cystic Fibrosis Research Foundation, $1,000; Family Service Association, $2,500; Guadalupe Clinic, $3,000.

National Multiple Sclerosis Society, $2,000; Neighborhood House, $3,500; San Diego County Association for Retarded Children, $2,500; Sunnyside Guild, Inc., $1,000; Traveler's Aid Society, $1,000; Volunteers of America, $1,000; Muscular Dystrophy Association of America, Inc., $1,000.

Veteran Convair Employees Die

Two long-time Convair SD employees, both of whom had retired from active service, died last month. W. H. Shattuck of Dept. 25 died Aug. 16 and A. E. Rimmer (Dept. 31) died Aug. 26.

Shattuck was the first man hired by Consolidated in San Diego and had 22 years' service when he retired in 1957.

Rimmer had 31 years to his credit at his retirement, also in 1957. He originally joined Consolidated Aircraft in Buffalo, N. Y.

'Prices, Costs and Contracts' Subjects For Special Astronautics Course

A unique educational program at Astronautics which included students from Fort Worth and San Diego Divisions as well as Convair's General Offices last week graduated its first class.

Called "Prices, Costs and Contracts," the course was taught at Astro by Harbridge, Inc., a leading educational consulting firm of Boston. Instructors were three key Harbridge men, plus a course director.

Students hailed from many Astro departments, although material, estimating and contract functions predominated. In addition, class space was kept open for visiting students from other Convair units on a rotating basis.

The entire program is a part of Convair's continuing emphasis on the professional development of its employees.

Initial classes included 60 students who attended four hours per day throughout the week. They were offered in a conference room at Westgate Warehouse.

The program was described as the first offered by this firm on the West Coast. It is a condensation of a 14-week course in pricing developed for and used extensively by the Air Force, with added material of special interest to Convair.

Dealing primarily with phases of sub-contracting, the course also gave students a closer look at other subjects.

B-58s Will Be Equipped With Escape Capsules

Escape "capsules" which will give B-58 Hustler supersonic bomber crewmen higher safety and survival factors under any conditions they are likely to encounter are now undergoing exhaustive tests.

They're designed to make it safer for crewmen to bail out at speeds nearing Mach 2, should it become necessary and to make it safer for crewmen to land—whether on land, sea or ice.

Also they will help crews survive after landing.

"We've tried to anticipate most everything that could happen to an airman," said Tino Sierra, project design engineer in furnishings. "And we then tried to provide him with safety and a good chance to survive."

When the capsules are operational, each crewman will sit inside an open capsule in his crew compartment when the B-58 flies.

If it became necessary for the crew to escape from the airplane, each crewman would trigger the capsule's mechanism. The capsule closes to completely enclose the airman, who then triggers the ejection mechanism.

After the man in the capsule clears the airplane, and when he is at the proper altitude, a parachute opens to lower the capsule to the ground—or water.

On land, the capsule provides the man with a habitable environment—whether on the polar ice cap or barren desert.

On the sea the capsule floats. It also protects the crewman from water or other discomforting elements.

The capsule will provide him with means to survive (food, etc.) until a rescue team can answer the call from the capsule's self-contained two-way radio.

Dr. Green New Physics Chief

Dr. Alex E. S. Green, former professor of physics and scientific director of Florida State University has been named chief of physics of Convair SD engineering department, announced W. W. Fox, SD chief engineer.



Dr. A. E. S. Green

Dr. Green relieves Dr. J. C. Clark, who has been serving as acting chief of physics since the resignation of Dr. J. W. Bond Jr.

Well known in the field of physics, Dr. Green is author of the textbook, "Nuclear Physics," as well as a number of papers on various aspects of physics.

He received his B.S. degree from City College of New York, a master's degree from California Institute of Technology, and a doctor's degree from the University of Cincinnati.

He also has served in consulting capacities with the theoretical division of Los Alamos Scientific Laboratory, physics division of Oak Ridge National Laboratory, and Oak Ridge Institute of Nuclear Studies.

Convair Daughter Will Give Recital

Virginia Rubottom, daughter of H. W. Rubottom, SD chief of educational services, will repeat a piano recital which proved popular earlier in the summer. The recital is set for next Wednesday (Sept. 9) at 7:30 p.m. in the auditorium of the San Diego Library, 8th and E Sts.

The program will consist of Partita No. 2 by Bach; Variations and Fugue on a Theme of Handel by Brahms; Valses nobles et sentimentales by Ravel; and Sonata No. 3 by Prokofiev.

The young pianist's brilliant technique and mature interpretation have been praised by many music critics. She will return to London this fall to continue her music studies.

Club Members Aid United Fund

Two hundred members of the Convair SD Management Club have volunteered their services to help spearhead the United Fund campaign in San Diego.

Each will be assigned three accounts to contact for United Fund contributions. He will be asked to follow through until a complete report has been obtained.

Most of the accounts assigned the Management Club group will be small business organizations in the area. Individual solicitation will be the responsibility of other groups.

A one-hour organizational meeting has been tentatively set for Sept. 15 at 3:45 p.m. in the Bldg. 32 cafeteria, according to J. K. Field, chief of SD employee services.

Recruiting responsibilities were handled by the club special projects committee, chairmanned by R. M. Montgomery (Dept. 21-1). While Montgomery was on vacation the duties were performed by B. R. Hisaw (Dept. 21-1).

L. G. Lawson Attends Toastmaster Meet

L. G. Lawson, general supervisor in Convair SD tooling inspection, represented Convair Toastmasters Club No. 457 at the San Francisco meeting of Toastmasters International last week (Aug. 27-29).

He also was among Toastmaster members honored at the Founders Breakfast as having completed advanced training. Lawson is one of the eight men in the San Diego-Imperial County area, which encompasses 1,100 members, to have finished the training—which requires the fulfillment of 18 different types of speech assignments in addition to the 12 basic speech requirements.

Scientist Instructs Graduate Seminar

Dr. A. L. Berlad, senior staff scientist at Convair's scientific research laboratory, will be instructor of a graduate seminar in the San Diego State College Campus Evening Program this fall.

The seminar course, "Physics of Reactive Media," will be held once a week, Tuesday evenings, from 7 to 8:40 p.m. It is a two-unit course.

For further information contact JU-2-4411, ext. 375.

★ Convairiety ★

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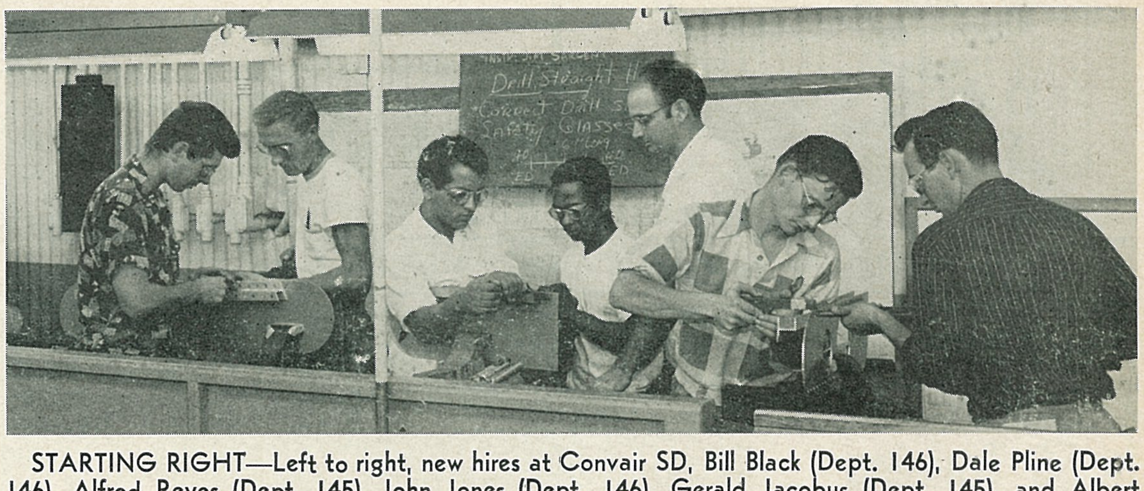
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Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



STARTING RIGHT—Left to right, new hires at Convair SD, Bill Black (Dept. 146), Dale Pline (Dept. 146), Alfred Reyes (Dept. 145), John Jones (Dept. 146), Gerald Jacobus (Dept. 145), and Albert Schroeder (Dept. 146) learn proper riveting procedure from instructor, James Sargent (Dept. 146), third from right, in new indoctrination course for wing assembly.

New Hires for Assembly Lines Given 10-Hour Indoctrination

A 10-hour indoctrination training course for new hires at Convair San Diego is teaching inexperienced men who will be going into wing assembly more in a little over a day's time than they were formerly absorbing in several weeks.

Realizing that the new hire, even though assigned to an experienced partner, often picks up incorrect procedures and flounders for some time in unfamiliar terms and paper work connected with his job, SD educational services is coordinating a series of new familiarization classes.

"Our object is to give as much assistance as possible to the line supervisor and the new employee," explained H. W. Rubottom, chief of educational services. "The new streamlined course gives the employee an idea of what his work will be and relieves the foreman of a great share of the fundamental explanation on the job."

Coordinated by W. E. Newton of SD educational services, the 10-hr. course has already been given to about 100 men going into Depts. 142, 143, 144, 145, and 146 during the last month.

C. W. Clark, general foreman of wing and primary assembly, said of the new course, "We feel that this is a most valuable training program, tailored to fill a definite need. In our opinion, it is more than meeting expectations."

Classes are limited to six men at a time, who learn good practices and pitfalls of production, importance of quality, economy, and of meeting schedules, as well as the company's cost reduction and Employee Suggestion program.

During the first day, under tutoring of James Sargent (Dept. 146) and Dan Sullivan (Dept. 145) the newly-hired men become acquainted with tools and equipment, techniques of using them, and tool storage. They are shown how to measure, select, and install the right rivet. After demonstration of what happens when the wrong method is used, they are paired off into teams to work out a complete riveting operation from specifications.

During the first hour of the second day, Newton gives a concise run-down on Convair's position in the business world, the Convair 880 program, rules of safety and housekeeping, protecting company property, avoidance of waste, and supervision's place in the company's administration.

In the final hour of the course, James Ames, wing assembly foreman, explains shop forms and paper work which each worker must handle along with his job. Said Ames, "Instead of depending upon new people asking questions and getting right answers from fellow workers, we find that they now are going on the job understanding the routine from the first day. It gives newcomers a feeling of confidence which is reflected in their work and increases their value to the company.

"Also, since the indoctrination has been in effect, we have seen a great deal more interest in Employee Suggestions among new men."

According to Newton, the same type of indoctrination may be arranged in the future for other production departments as the need arises.

Trivoli Is Top SD Apprentice

First "outstanding apprentice of the year" at Convair San Diego was named last month in what, hereafter, will be an annual selection.

George V. Trivoli, in his final year as an electronics apprentice at Convair SD, received an engraved plaque from Division Manager B. F. Coggan and a check for $50 for his accomplishments. A perpetual plaque carrying each year's winner will be kept in SD educational services offices.

H. W. Rubottom, SD chief of educational services which conducts the company apprenticeship program, said that a combined sub-committee of the two Convair Joint Apprenticeship Committees selected Trivoli on information supplied by supervisors and SD Junior College. Factors considered in making the selection were proficiency on the job, grades, attitude and attendance on the job and in school, leadership potential, off-the-job achievements, and personal qualifications.

Runners-up, also of Dept. 6, were Norman Niemet and Roger Casey.

Astro and SD Men to Teach

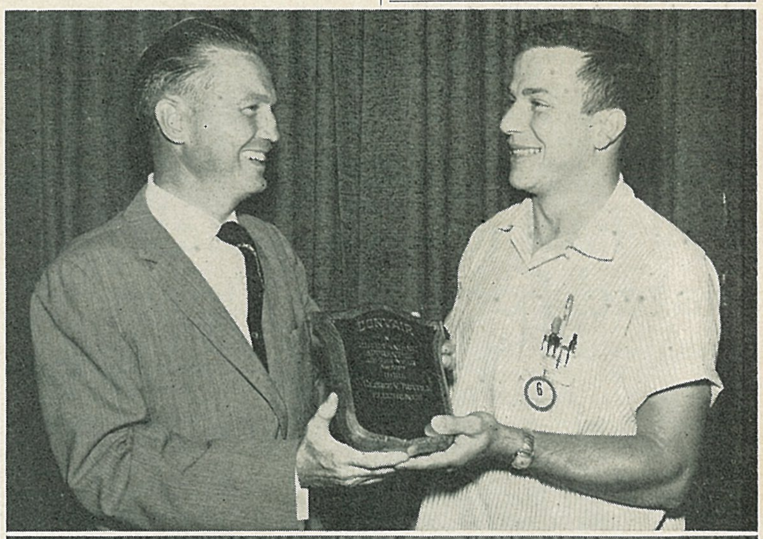
Twenty-eight Convair Astronautics and San Diego men will be teaching University of California Extension classes when the fall semester opens this month.

Astronautics personnel doubling as instructors are Raymond A. Ezekiel and N. Thomas Norden, management development specialists, and C. Bruce Moorehead of contracts administration, who will teach business administration courses. Teaching classes in engineering will be Jack J. Block, training specialist; James M. Bowyer, design specialist; Ralph H. Hinrichs, senior reliability engineer; Ernest Wade, senior design group engineer.

Mathematics instructors from Astro will be E. Ward Cheney, design specialist; James F. Haskins, senior research engineer; K. Leon Montgomery, research engineer; Conway C. Sams, research engineer; Bruno F. W. Witte, senior research engineer.

Convair SD men teaching engineering classes will be Harry G. Cooper, numerical control project engineer; Karl A. Faymon, senior aerodynamics engineer; Fabian C. Foushee, senior research engineer; James B. Herreshoff, David B. Medved, and Hideyoshi Nakamura, design specialists; H. F. Poppendiek, staff specialist; Harold H. Rosenbaum, design specialist; Hideo N. Yoshihara, head of theoretical aerodynamics.

Instructing in mathematics will be Maxwell Frank, service engineer; John J. Harton Jr., senior dynamics engineer; Lester Kraus, design specialist, physics section; Leo Lapidus, James P. Mitchell, and Theodore Rubin, senior research engineers.





APPRENTICE OF YEAR—George V. Trivoli, electronics apprentice in top photo, receives plaque from Convair SD Division Manager B. F. Coggan (left) as first "outstanding apprentice of year." Below, larger than usual group of SD apprentices receive journeymen certificates as they complete training. Left to right, Robert Du Pont (Dept. 600), Ronald Allison (Dept. 403), Edward Colonna (Dept. 406), Coggan, Glenn Criger (Dept. 403), and Frederick Trusch (Dept. 400).

Is It News?
Call Convairiety

It Might Interest You To Know...

Convair pays into both state and federal unemployment funds.

This money helps finance administration of unemployment programs and is paid out in weekly amounts to employees who have been laid off.

The actual payments vary in size with the states. In Texas maximum benefits are $28 weekly for 26 weeks. In California the maximum is $40 and duration is 26 weeks.

Convair is required to pay to the federal government for this purpose approximately $9 a year per employee. (Actually, the requirement is an amount equal to three-tenths of one per cent of the first $3,000 paid to an employee during the year. This does NOT mean that the employee pays anything himself. It is merely a system of arriving at the amount of the employer's payment.)

In 1958 Convair paid the federal government $592,305.92 for federal unemployment insurance.

Convair also pays substantially to states. In California the state exacts a sum equal to a percentage of the first $3,000 paid to each employee. (Again, this does NOT mean that the employee himself contributes.) This percentage is set from year to year and adjusted up and down depending upon experience in the previous year. That is, how much was paid out the previous year in payments to former Convair employees who were laid off. Also, general economic conditions in the state during that "yardstick" year have a big effect upon the rate required. Currently in California the rate is 2½ per cent of the first $3,000 paid an employee. It is a substantial jump over the preceding rate.

In Texas the unemployment program works on a similar principle, with Convair paying a percentage of the first $3,000 earned per employee, etc. Currently the rate is one per cent, lower than California's possibly because of more stable economic conditions during the "yardstick" year, as well as lower benefits in effect in Texas.

As a practical matter, the sums that Convair is required to pay the states is inclined to fluctuate rather violently. For example, Convair for all of 1958 paid $1,328,535 into various state funds. But, due to rate increases in effect in 1959, Convair this year for the first six months alone had to pay $3,389,906!

Overland Routes Mapped For Deliveries of Atlas

During the months ahead, as the Air Force begins to activate a string of Atlas missile bases over the country, the problems of transporting missiles to sites will increase manyfold.

While Convair Astronautics, builder of the Atlas, and Air Force planners are constantly seeking faster methods of deploying the Atlas, present emphasis is upon the overland convoy system.

This involves a special Atlas handling trailer, a large van (on longer hauls), plus an assortment of trucks and cars bearing "wide load" signs, flashing warning lights, etc.

While Astro played a key role in mapping early routes (like those to the Air Force Missile Test Center in Florida) much of the planning of future routes falls to outsiders.

Noteworthy is the Directorate of Logistics Support Management (D/LSM) of the San Bernardino Air Materiel Area (Air Force) and the Military Traffic Management Agency (MTMA), a Department of Defense unit serving the major military branches. The D/LSM office arranges for MTMA to have route surveys made by commercial carriers and contract for all Atlas moves.

As time for an Atlas shipment draws near, Astro transportation personnel notify Simeon Johnston, Air Force traffic representative from D/LSM at Astro. He, in turn, tips off the Oakland regional office of MTMA which sends out information to all regional offices responsible for areas through which the Atlas convoy will pass.

These offices help obtain state (and sometimes city and county) road permits.

Meanwhile, a carrier has been notified and arrangements made through San Bernardino for Air Police security forces to accompany and guard the cargo.

As the missile convoy is formed, a final inspection involving Air Force quality control, Astro transportation and carrier personnel takes place. Each vehicle must be certified "ready to roll."

Once the convoy clears the Astro plant there is a standing order to "keep moving." The truck pulling the accompanying van, used to carry supplies and spare pressure bottles for the missile trailer, is the same as the one actually hauling the missile. If the latter breaks down, the former replaces it to keep the missile moving.

Normally, the convoy covers from 250 to 300 miles per day, usually during daylight hours. Air Police guard the missile at any stop, including those made overnight. Longer stops are usually at military reservations.

City, county and state police often help speed the convoy through urban areas.

Planners have found many quirks in setting up present and future routes. For instance, a state law in Alabama prohibits such convoys from traveling over state roads on Saturdays and Sundays.

Other states have special ordinances, all of which must be hunted out and accounted for in setting up future delivery trips.

Three-Day Weekend In Store for Convair

Convair people everywhere will enjoy a three-day weekend over the Labor Day holiday.

All Convair divisions will suspend work on Sept. 7 since the first Monday of September is traditionally observed throughout the country as a legal holiday.

Only necessary maintenance and security personnel will work.

'Free' Benefits Cost Convair Each Year

(Following are some of the benefits enjoyed at Convair. Where possible, exact figures of 1958 cost are given. Other figures are approximate.)

For Vacations:
$15 1/2 Million

For Holidays:
$12 Million

For Sick Leave:
$5,639,257.
("Direct" employees alone.)

For Rest Periods:
$9 1/4 Million

For Shift Bonus:
$4 1/2 Million

For Retirement:
$14,394,871.

For Insurance:
$5,206,398.

(This was the cost to Convair in 1958 for employee group insurance, over and beyond contributions of employees.)

On-Job Insurance:
$750,000.

Social Security:
$5,930,502.

(Employees paid a like sum, which Convair matched.)

Toastmasters Meet Jointly

Convair Toastmasters Club No. 457 joined with five other clubs of the San Diego area in a special educational meeting Aug. 17 in the Astronautics dining room.

Other clubs represented were Padres, Solar, Northeast, Balboa, and Ryan Toastmasters.

In charge of arrangements were James Carr of Astro product support and Cy Campbell, Astro reliability. Frank Jallu of Northeast Toastmasters acted as chairman of the meeting.

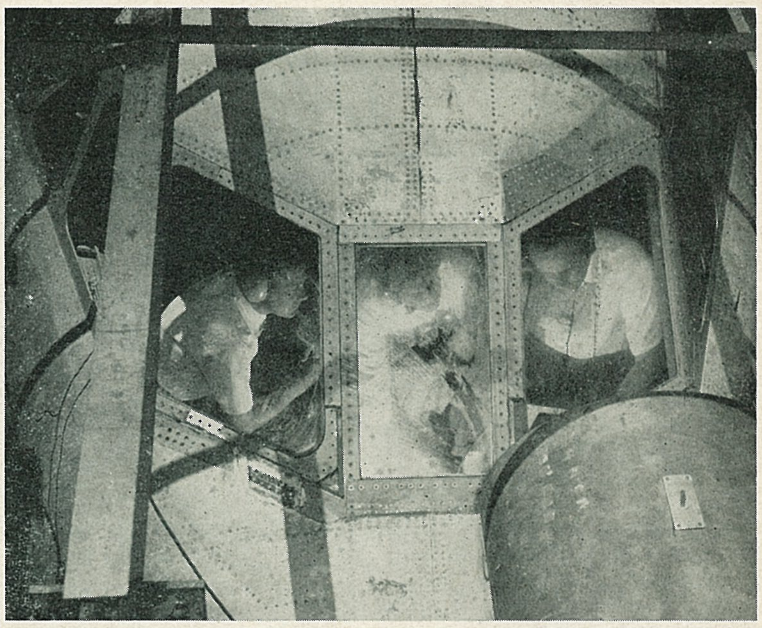
Convair SD and Astro members taking part were Larry Lawson (SD-Dept. 188) and James Lew (Astro-Dept. 534), speakers; Keith Blair, SD chief librarian, evaluator; Andy Gormish (SD-Dept. 6-51), sergeant at arms.

Convair Toastmasters elected officers this week (Aug. 31) with installation set for the Oct. 5 dinner meeting.

Scientific Center Sponsors Sought

Convair Astronautics men and women interested in seeing a scientific information center established in San Diego are being sought to assist in formation of such a program.

Needed are persons who will devote part of their spare time to the tasks at hand, according to Robert J. McPherson of Astro. Those interested may contact McPherson at ext. 1115 or Sidney Albert, ext. 3328.



STORMY WEATHER—From left, Bob Bush, Stan McCunny, and Andy Segal take readings inside Convair 880 cockpit as rain and wind are hurled against Convair 880 windshield with hurricane force in rain-clearing tests at thermodynamics lab.

Water 'Shot' at Jet 880 To Test Pilot Visibility

Sheets of water are being blown at a Convair 880 windshield as Convair SD engineers search for the best means of clearing the 880's cockpit glass so pilots can see despite any downpour of rain.

Although Convair's jet transport will fly on instruments in all kinds of weather, pilots will need a clear windshield for take-offs, approaches, and landings. To give the pilot the most visibility possible, a nozzle and ramp combination to clear the glass with high energy air is being put through rigid tests in Convair SD thermodynamics lab.

Steady walls of water approximating rainfall of 2 inches per hour are being shot out of a large pipe at an 880 windshield in airstreams simulating 880 jet speeds at takeoff and landing.

"Windshield wipers which cleared cockpit glass of conventional planes would be inefficient on high-speed jet transports," explained David Krause, SD senior air conditioning group engineer. "Blades of the wipers would never touch the glass as they are lifted by the airstream at high speeds of today's jets."

(Rain clearing air blast system has been used satisfactorily on jet interceptors for several years.)

Problems challenging development engineers working on the transport system were the wide variance in temperatures and pressures of the engine bleed air used in the windshield rain clearing system. Temperatures range from 250 to 750 degrees F. and pressures from 15 to 40 pounds per square inch above outside pressure.

"Although the nozzle has become an integral part of the 880 through tests conducted early in the design stage, ultimate configuration of a ramp to deflect the air and still clear the windshield will be determined from our current tests," said Krause. Development of the rain clearing system is a joint air conditioning and thermodynamics group project.

Testing in progress at the thermodynamics laboratory is under direction of Stan McCunney, design specialist; Bob Bush, senior design engineer; Andy Segal, thermodynamics engineer; and Chet Skeen, test conductor.

When final configuration has been determined, the ramp will be installed on production 880s.

Missile Commanders Win Higher Ranks

New stars were added to the shoulders of two top men in the Air Force ballistic missile program recently.

Osmond J. Ritland, commander of the AF's Ballistic Missile Division, was elevated to the rank of major general, an addition of one star. Former Col. Charles H. Terhune Jr., AFBMD vice commander, received his first star as a brigadier general.

Ceremonies marking the promotions were held recently with Lt. Gen. B. A. Schriever, ARDC commander, doing the honors. Gen. Ritland took over the post held by Gen. Schriever prior to his new assignment and promotion to the three-star rank.

Space Tracking Device Noted

An outgrowth of the Convair-developed Azusa tracking system coupled with recent developments has been proposed as a means of simplified tracking and guiding of missiles and spacecraft to Mars, Venus and beyond.

James W. Crooks Jr., Astronautics design specialist, revealed details for the system last week in a paper presented at the Fourth Symposium on Ballistic Missile and Space Technology held at UCLA, Los Angeles.

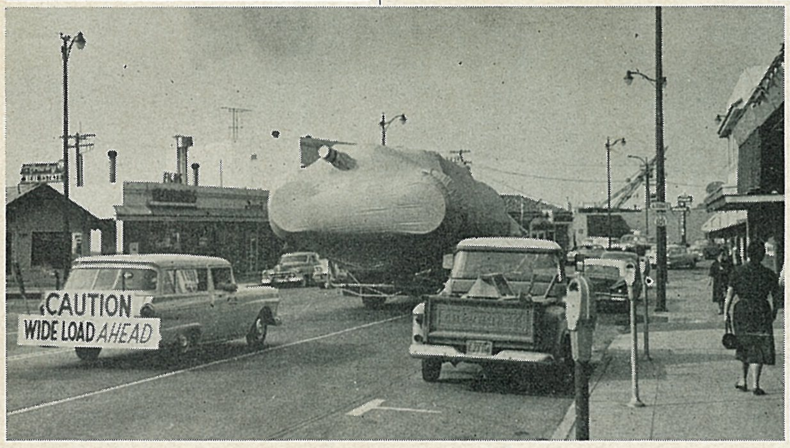
Crooks pointed out the new system would utilize the same type of phase-comparison techniques employed in tracking ballistic missiles with the Azusa system, now in use at Air Force Missile Test Center, Florida.

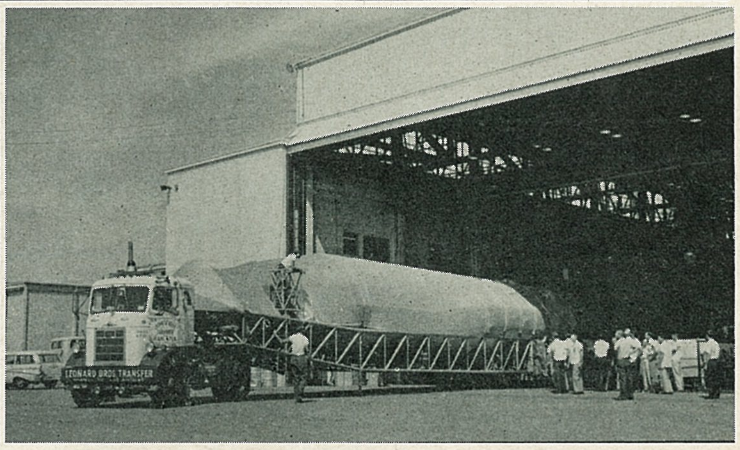
The system would involve two ground stations a few thousand miles apart and a transponder in the spacecraft. A transponder is a small receiver-transmitter capable of passing back and forth microwave signals between ground stations and the spacecraft. Such information allows exact information on velocity and position of the spacecraft.

The new system would employ three-dimensional tracking information. One dimension makes use of the earth motion, another, the difference of distance from the spacecraft and ground stations, and the third the direct range measurements.

Also possible would be fi[illegible] guidance commands necessary [illegible] send the spacecraft into a selected orbit around Mars or Venus. Or it could direct impact onto the surface of these planets.

In the latter precise determination of exact distances between the earth and target planet would be possible.





TRAVELER—Atlas missiles are putting in more and more miles on highways, and will be doing even more traveling as new Atlas bases are activated. At left above a shrouded missile moves along Highway 101, presumably toward Vandenberg AFB. At right an Atlas arrives at Hangar J of Florida's AFMTC. Convoys cover about 300 miles per day over carefully-planned routes.



CAVEMEN—Home-made cave in backyard of R. H. Bacon (SD Dept. 8-1) is top neighborhood attraction for youngsters. Getting ready to enter confines are (from left): Jeff Peters, Randy Loveland, Keith Loveland, Daron Bacon and dog, Penny.

Ala Disney

Ah, Boyhood! Cave Life Revived As Convair Kids Dig Their Own

The yen of a 10-year-old boy to dig a hole in the side of a hill has turned into a Disneyland-style cave complete with entrance tunnel, stalactites, and enough authentic atmosphere to make a caveman feel at home.

Daron, and his sister Sharen, children of R. H. Bacon (SD Dept. 8-1), don't have far to go to enjoy the "comforts" of cave life. In fact, no farther than their own backyard.

The hill itself is a conglomeration of stones, dirt, cactus, plants and other materials tossed into a heap while Bacon was landscaping his backyard.

"It got to be a pretty good sized accumulation," Bacon explains. "When my son and a group of his pals began digging out an opening I just joined in the act."

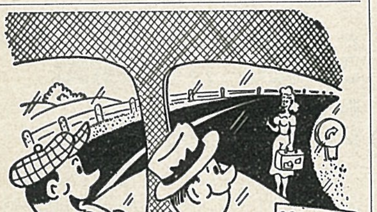
The project turned into a sort of community affair with the neighborhood boys and Bacon. In addition to digging into the side of the hill, the cave was extended out of the hill proper, buttressed with supporting timber, and tarpapered.

Bacon and his crew are now in the stages of a realistic plastering job inside, shaping crevices, ledges, small dead-end turnoffs and even stalactites hanging from the ceiling.

"We plan to cover the whole thing with plants, rocks and vine so that it will be as natural a formation as possible," Bacon said. "We've left airhole space which together with the entrance will provide plenty of ventilation."

Although four adults might find things a little crowded in the cave room, six or seven children will fit easily.

"You can guess where the favorite meeting place of the Cub Scout troop is," Bacon added.



"Quick, Joe, hide that 'No Rider' sign."

Auditorium Opened For Engineer Use In Remodeled Bldg.

An auditorium for the use of Convair SD engineering personnel has been completed on the second floor of the newly-remodeled Bldg. 5 at Plant 1.

All groups in the engineering department are privileged to use the new auditorium, which has a seating capacity of 155. It is available for conferences, training sessions, or meetings of large groups. Moving pictures and illustrated talks of general interest will be scheduled during lunch periods whenever possible.

Ultimately, a sound projector, slide projector, opaque projector, microphones, blackboards, and electric pointer will be made available. At present, such equipment may be borrowed from the engineering training office, ext. 1827.

Arrangements to use the auditorium may be made at the office of R. R. Hoover, assistant chief engineer—administration, ext. 671.

Convair Reservists Attend Staff Class

Two Convair SD men recently attended the active duty phase of the Command and General Staff Course at Fort MacArthur, Calif., U. S. Army Reserve School.

Jack C. Ladd of Palmdale (Dept. 324-2), who holds the rank of major, and C. D. King of SD-Dept. 6-35, with a rank of colonel, were at the school Aug. 10-24.



TWIRLING ALONG—These three Convair cuties would add appeal to any parade. Lynne, 11, Peggy, 9, and Jackie, 7, are daughters of C. W. Thompson (SD Dept. 215). The twirling trio has appeared in baton contests in San Diego area.

Songs For a Room

Nine Convair Voices Among Hotel Lobby Singers at FW

Strains of "Sweet Adeline" and "Down by the Old Mill Stream" are among traditional barber shop quartet songs harmonized by nine Convair Fort Worth songsters every Monday night in the lobby of Hotel Texas.

The nine are members of the Society for the Preservation and Encouragement of Barber Shop Quartet Singing in America, a national organization.

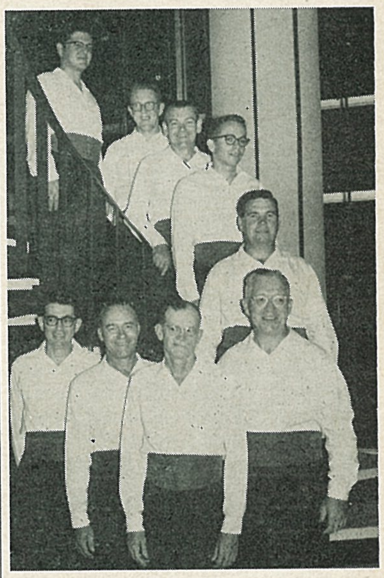
The group meets with about 51 others in a room furnished by Hotel Texas every Monday night at 8 p.m. At 10 p.m. they gather their vocal chords and head downstairs to put on what they call a "lobby show."

"This show is in return for the free room," commented Dept. 81's Chester E. Keith, "bathtub tenor" recently turned barber shop.

Other Convair Fort Worth people harmonizing on Monday nights include Cal Barker, Dwight Florence, George Brigman, Floyd Harris, M. R. Long, Bill Sitton, Milton Miller, and Bob Lavery.

Clad in dark blue trousers, white long sleeve shirts and wearing red cummerbunds, Fort Worth's chapter sings for civic organizations, hospitals and old folks homes.

Keith said if there are any Convair FW people interested in joining, they may contact one of the Convair members or call him at PE-8-5683.



BARBER SHOP — Here are Convair FW people active in SPEBSQS. They meet every week at Hotel Texas for "lobby show."



ONE VOTE HERE—Charlene McCoy, 16, daughter of Charles W. (Dept. 451) and Jeannie G. (Dept. 549-5) McCoy of Astronautics is candidate for "Miss Ocean Beach" to be chosen Sept. 12 during annual "Daz-O-Fun" celebration in that community.

New Engine Change Speed Record Set

Five Carswell Air Force Base B-58 Test Force NCO's recently completed a routine engine change on the Hustler in what is believed to be record time.

The test force crew took only six hours to remove the engine and install another.

Carswell officials said the six hours (30 manhours) also included time for quality inspection.

The mechanics were S/Sgt. E. H. Thompson, A/1C E. L. Euglow, A/1C D. T. Boynton, A/1C E. H. Woodall and S/Sgt. R. R. Yates.

F-102s From Naha Scout Typhoon Bearing Down on Okinawa Base



STORM SNOOPERS—Lt. William L. Clark of 16th FIS at Naha Air Base, Okinawa, describes to Capt. Emmet "Pete" Walden maneuverability of Convair-built F-102A he piloted into recent typhoon.

Convair F-102As have added another capability — typhoon tracking—to an already long list.

Two F-102As based at Naha Air Base, Okinawa, were sent aloft to scout the oncoming storm recently as Typhoon Billie headed for the Pacific island. Ground radar stations could see the turbulence but could not pinpoint its position.

The two Convair-built interceptors, piloted by Capt. Emmet Walden and Lt. William L. Clark of the 16th Fighter-Interceptor Squadron penetrated the weather right to the wall of clouds which marked the advancing forward edge of the violent maelstrom.

Captain Walden, using his aircraft radar system, was able to "see" a large portion of the storm, including the "eye." From the relayed information, forecasters were able to fix the typhoon's position and advise Okinawa of the approaching danger. The F-102As were flown into the tempest several times that day and remained on vigil until the storm had passed clear of the island.

First Convair jet interceptors to go to the Pacific area reached Okinawa in March of this year.

Evening Electronics Course Will Start

"Industrial Electronics," a San Diego Junior College extended day course, taught by Astro's Daniel Buckley (Dept. 545-7) opens Sept. 14.

Students who are presently engaged in the electronics or electrical fields may register by attending the initial 7 p.m. class in Room K-73, Kearny Mesa High School.



". . . Just as I suspected! Your glove compartment has a leak!"

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

* * *

Canadair Wins Contract For 200 F-104 Airframes

MONTREAL — The Canadian Department of Defense Production has awarded a $91½ million contract to Canadair for the manufacture of 200 F-104G airframes.

A government release said the figure quoted is a ceiling price and the actual cost to the Crown will not exceed this. If the actual cost is less, one-third of the savings will be shared by Canadair, and two-thirds by the Crown.

Orenda Engines Division of A.V. Roe Canada Limited was awarded the contract for the manufacture of the Starfighter jet engines.

The announcement was made after completion of negotiations between the Canadian Department of Defense Production and the Lockheed Aircraft Corporation and the General Electric Company.

The release stated that proposals for the airframe were received on a competitive basis from the three leading aircraft manufacturers in Canada—A. V. Roe Aircraft Limited, Canadair, and the DeHavilland Aircraft of Canada Limited.

"All proposals were given careful analysis and the government has accepted those which in its judgment offer the best prospect of securing the manufacture of the airframe at the lowest cost. In addition, the manufacture of the airframe at Canadair will result in significant savings through lower overhead charges on other defense work in the plant," the release continued.

The release said the government aimed throughout to achieve a reasonable regional distribution of the industrial effort, if this could be done with due regard to cost.

The subcontract pattern, with respect to the manufacture of both the airframe and the engine, also contemplates a wide distribution among plants across the country.

Stromberg-Carlson Man Drafting Rules On Nuclear Hazards

ROCHESTER — Edward Diamond, secretary and general counsel of Stromberg-Carlson, left last month for Vienna where he is representing the United States on an international panel of experts on Civil Liability and State Responsibility for Nuclear Hazards.

This panel, an agency of the International Atomic Energy Association, is drafting an international agreement covering these aspects of the peaceful applications of nuclear energy.

At its second meeting in Vienna last May, the panel agreed on the main features of a proposal for an international convention.

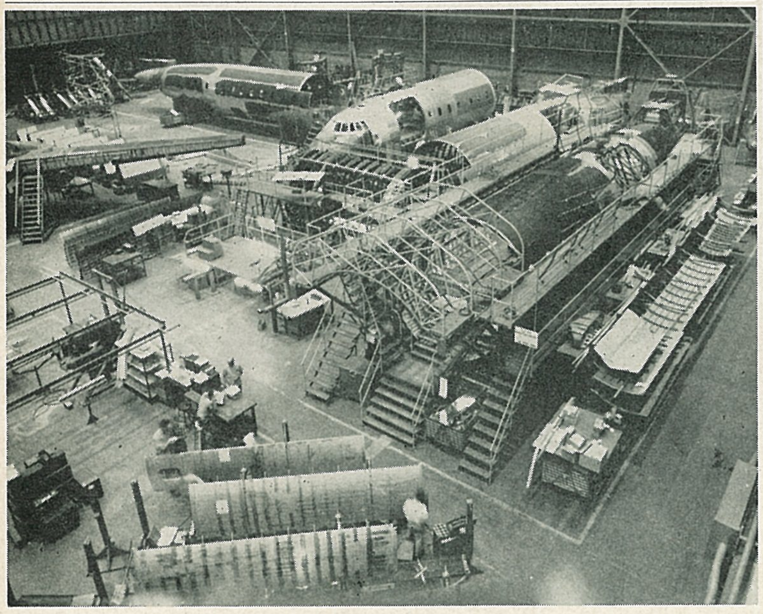
Agreement was reached that the courts of the state in which nuclear installations are located should adjudicate claims for damages, except for incidents occurring during transport of nuclear materials. Transportation incidents would be heard by the courts of the country in which the incident takes place. The panel also agreed that liability for a nuclear incident should be absolute—no proof of fault would be necessary—and that an international standard limiting amount of liability should be established.

Fan Developed For Atomic Submarines Will Be Used in 880

GROTON — A high-efficiency fan that made a major contribution to noise-reduction in atomic submarines has found application in military and commercial aircraft.

The vaneaxial fan, developed by Electric Boat Division during the course of submarine research, has been accepted for installation in the Republic F105 jet interceptor, the Lockheed Electra turbo-jet airliner and the Convair 880, world's fastest commercial airplane.

Slotted blades give the vaneaxial fans a boundary layer control that produces either greater efficiency or less noise and vibration, depending on the effect desired. They are ideal for installation in air conditioning and ventilation systems.



AIR FREIGHTERS—Now in full production at Canadair, CL-44 is first aircraft to be designed specifically for long-range air freight work. Fleets of swing-tail CL-44s have been ordered by Seaboard & Western Airlines and The Flying Tiger Line.

Harpers to Publish 'Story of the Atlas'

"The Story of the Atlas," a 6,500-word illustrated history of the nation's first intercontinental ballistic missile by John Chapman, Astronautics communication specialist, has been accepted for publication.

Harper and Brothers has contracted with Chapman for publication of the story in a hardback edition late this year or early in 1960.

It will be the first publishing venture for Chapman who has been with Convair since 1956 and at Astronautics since 1957. However, Chapman is credited with much of the work involved in preparing Astro's popular "Space Primer."

Wood Subcontracting Chief for Convair SD

L. A. Wood was named chief of subcontracting at Convair SD effective Aug. 24, according to W. R. Bruce, SD manager of material.

Replacing Wood in his former post of purchasing agent—subcontracting will be M. F. Mosely while W. H. Parry will succeed Mosely as chief of material estimating, material forecasting, and cost administration.

Wood, a native of Montana, joined Convair SD in 1943 in flight and service. He has since been connected with material, subcontracts, and purchasing departments.

Mosely came to Convair in material department in 1951. He was named to his last position in July of this year. W. H. Parry has been at Convair since 1956 when he joined purchasing as a buyer supervisor.

Launching of Second Polaris Sub Nears

GROTON — The nuclear powered submarine Patrick Henry, a 380-foot mobile base for firing Polaris ballistic missiles, will be launched Sept. 22 at Electric Boat Division.

The Patrick Henry will be the second Polaris-equipped atomic sub launched. The lead ship of the class designed as underwater missile stations is the George Washington, which General Dynamics launched June 9. The Washington is now being fitted out for sea trials and is scheduled to become operational in 1960 with the Polaris weapons system.

Vienna Soil Broken For Atomic Reactor

VIENNA—Ground was broken in a ceremony here last week for the first atomic reactor in Vienna, the inherently safe "Triga" research and isotope producing reactor conceived and developed by General Atomic Division.

The Austrian Minister of Education and officials of leading universities throughout Austria participated in the ceremony at a site on the Danube where the newly-formed National Atom Institute will be built.

The Triga will be an above ground model known as Mark II with steady state power level of 100 kilowatts.

GD Division to Build Telescope 'Aimer'

GROTON—The aiming system for the nation's newest and largest radio telescope will be built by the Electric Boat Division.

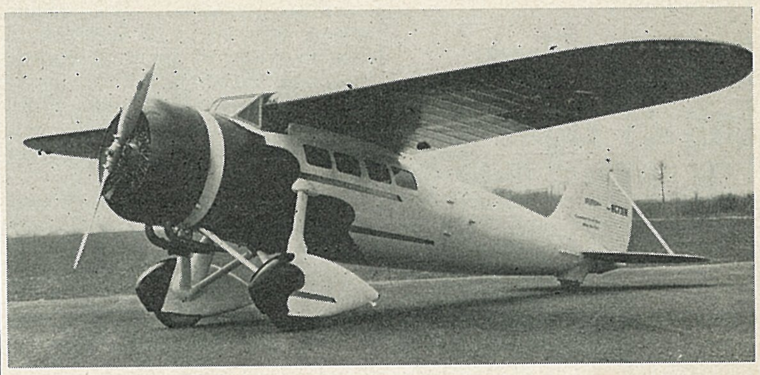
To be installed at the National Radio Astronomy Observatory in Greenbank, W. Va., the giant telescope will have a parabolic antenna 140 feet across at its widest point that will be capable of opening up hitherto unseen galaxies.

NEW CONTROLLER

ROCHESTER, N. Y.—Allan R. Shilts has been named controller of the Stromberg-Carlson Division, according to Robert C. Tait, Stromberg-Carlson president.



FLEETS—For commercial market, Consolidated built some 1,000 Fleets. Of substantially same dimensions, there were more than dozen models, marked chiefly by different power plants. Above is model F-10-G.



FLEETSTER — Consolidated model 17-A was monoplane cabin transport, nine passengers, with pilot's cockpit in leading edge of wing. Speed was 190 mph maximum with 160 cruise and 61 landing speed. Range was approximately 750 miles and ceiling 20,000 ft. A related version (pictured in Convairiety, Aug. 19) was parasol-winged Model 20, for airmail flyers. Wing was raised 12 in. above fuselage and pilot was located aft of cockpit.

Consolidated Goes Into Private Plane Business

(Below is installment No. 16 in continuing history of Convair.)

The late 1920s developed a boom in private flying, and Consolidated Aircraft was ready with a product.

In 1928 Reuben Fleet, Consolidated's president, moving with speed and secrecy, rented a suite of rooms in the Buffalo Athletic Club and locked himself up there with four staff members: Joseph Gwinn, engineer; George Newman, factory manager; Leigh Wade, pilot and sales director; and Ralph Oversmith, material supervisor. In less than three days they finished design of the Husky Junior, a smaller, spruced-up version of Consolidated's military trainer line. Three machines were built in 26 days and flown to a Chicago aeronautical fair, where two were sold for $7,500 each.

Sales were slow for a time. The program was $174,000 in the hole by the end of the year. When the company's bankers and directors wanted to drop it, Fleet bought the rights to the Husky Junior and set up Fleet Aircraft, Inc., a sort of personal subsidiary, to handle the commercial trainer end of production. The plane was renamed the Fleet and by the summer of 1929 sales were booming. Fleet resold the rights to Consolidated.

More than 300 Fleets were delivered in 1929 and several hundred were sold at home and abroad in the early 30s, despite the depression. At the National Air Races held in Cleveland, in August, 1929, Mrs. Keith Miller flew a Fleet Model 2 to victory in the 50-mile event for women. (Runners-up included Amelia Earhart.) A survey in the spring of 1930 showed Fleets in use at 19 of the country's 39 approved flying schools.

Fleet Aircraft, Inc., was kept intact as a sales agency. Its head was Lawrence Bell, a Consolidated vice president (and founder in 1935 of Bell Aircraft). A manufacturing subsidiary, Fleet Aircraft of Canada, Ltd., was set up in neighboring Ontario in March, 1930. It assembled Fleets from a combination of American and Canadian parts, in a small new factory built on a 100-acre airport at Fort Erie. W. J. Sanderson was named president. An early customer was the Royal Canadian Air Force, which ordered 20 trainers. The subsidiary was sold to Canadian interests in December, 1936, following Consolidated's move to San Diego.

All together, approximately 1,000 Fleets were built and sold. Easy to fly and built to last, CAA registrations showed 23 Fleets still in active use in 1956, including seven of the original Model 1.

All Fleets were substantially the same in dimensions and construction. Model designations usually indicated variations in power plant, of which there were more than a dozen. Most powerful Fleet was model 11, with Kinner R-5 engine of 160 hp. It had a top speed of 124 mph and ceiling of 17,800.

Officer of C-131 Sq. Honored by MATS

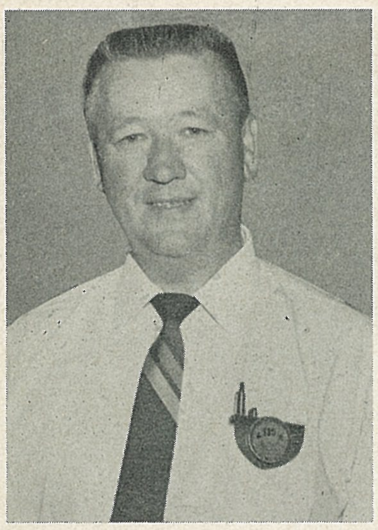
A senior master sergeant of a Convair C-131-equipped squadron has been chosen by the Military Air Transport Service as "outstanding airman of the year."

SM/Sgt. Dwight H. McCracken of the 1299th Air Transport Squadron MATS, attached to Bolling AFB, Washington, D.C., was chosen over 36 entries in the world-wide contest held at MATS Headquarters, Scott AFB, Ill.

McCracken has been in the service since 1939. He spent a year as prisoner of war during World War II when he was shot down while flying missions over Germany. He holds the Distinguished Flying Cross and Air Medal with three oak leaf clusters.



"This dress model? Oh! I just don't want to forget what girls look like."



FIVE AND TWENTY—Joseph Drozdz, foreman in Dept. 135 SD, last month received service emblem denoting 25 years service with Convair.

Summer Show Entries Light

The Convair SD Garden Club distributed blue ribbons and best of show honors Aug. 9 as the annual Summer Show closed club activities for the next two months.

E. L. Zimmerman, commissioner, reported the quality of blooms entered was excellent, but the quantity was below expectations. "The hot, dry summer probably had a lot to do with the number of entries," he added.

The following won blue ribbons: Mr. and Mrs. E. Coleman (Dept. 228-2) and granddaughter, Linda Sue, Mr. and Mrs. C. H. Splinter (Depts. 771 and 1-61), Mr. and Mrs. J. E. Henderson (Depts. 93-2 and 406), Mr. and Mrs. E. L. Zimmerman (Dept. 402-1) and son, Dennis, Mr. and Mrs. M. Alianelli (Dept. 223), B. Anello (Dept. 204), A. E. Brennan (Dept. 232), Mr. and Mrs. Bob Bohler (Dept. 6), and Ann Freedman (wife of R. A. Freedman, Dept. 6).

Best of show winners included Mr. and Mrs. C. H. Splinter, E. Coleman, Mr. and Mrs. J. E. Henderson, Mike Alianelli, A. E. Brennan, Mary Nell Bohler, and Dennis Zimmerman.

Rockhound Shack Reopens Sept. 8

The Rockhound Shack on Pacific Hwy. will reopen for business on Tuesday (Sept. 8), Danny Whorton, commissioner, reported.

Closed during the summer months, the shack will be open during the same hours as in the past: Monday, Tuesday and Wednesday from 7-9 p.m.; and for second shifters, 12:30 to 2:30 p.m.

Whorton said the first meeting of the fall season will be held Sept. 10, at 7:30 p.m., in the CRA Clubhouse at Gillespie Field. Color slides of Hawaii will be shown.

Log Book Entries

Promotions

Promotions to or within supervision effective Aug. 17:

Dept. 93-0, Cost Accounting: To accounting asst. supervisor, O. J. Ohlsson.

Dept. 135, 880 Forward Fuselage Structure: To asst. foreman, T, R. McDaniel.

Dept. 160, 880 Final Assembly: To asst. foreman, C. W. Johnston.

Dept. 180, Proofing Mockup: To asst. foreman, H. E. Collins, C. L. Ogle, F. V. Rourke.

Dept. 267, Model 8 Final Assembly: To asst. foreman, C. F. Price.

Retirements

JOHNSTON—Robert, Dept. 204. Seniority date Nov. 21, 1950, retirement effective Aug. 21, 1959.

LYNCH—M. A., Dept. 25-2. Seniority date Aug. 28, 1956, retirement effective March 19, 1959.

WRIGHT—Carl R., Dept. 218. Seniority date Jan. 16, 1956, retirement effective Aug. 21, 1959.

YETMAN—Hal A., Dept. 192-7. Seniority date Aug. 4, 1950, retirement effective Aug. 7, 1959.

Births

APERLO—Daughter, Jacqueline, 6 lbs., 7½ oz., born Aug. 13 to Mr. and Mrs. Peter Aperlo, Dept. 6-51.

MILLER—Daughter, Sallie Suzanne, 7 lbs., 4½ oz., born July 9 to Mr. and Mrs. Edwin A. Miller Jr., Dept. 6.

Deaths

BRUNNER—Henry H., Dept. 6. Died Aug. 14 at Veterans' Hospital, Sioux Falls, N. D. Survivors include a sister and a brother.

Registration Open Now For Fall Charm School

Convair San Diego ladies will be acquiring that "new woman" look when the new fall self-improvement and charm school opens this month.

Registration will be open until Sept. 18 for the CRA-sponsored course, said Martha Woodberry, CRA commissioner of women's activities.

The six-week series of classes is scheduled to start Sept. 30 and will be continued each Wednesday from 7-9 p.m. in the House of Hospitality, Balboa Park.

Fee of $7 per person must be paid at time of registration to insure a place in the class. Greater portion of the cost is underwritten by CRA.

Edith Antelline, SD charm school director, will instruct in fundamentals of good grooming, diet and nutrition, figure analysis, posture, business and social etiquette, make-up and hair styling, and basic wardrobe instruction.

All Convair SD women, including wives and daughters, are eligible, said Martha Woodberry. Registration may be made at employee services, both plants; Fordham St., office of Bessie Cooper, ext. 100; Rose Canyon, office of Dorothy Kniffen Reed, ext. 2239, or Virginia Cannon, ext. 2125.

Another advanced charm course will follow the completion of the basic charm training, and will probably start the middle part of November.

CRA Backs Contest For Deer Hunters

A special deer hunting contest will be conducted by the SD CRA in conjunction with the Industrial Recreation Association, Jack Swank, Gun Club commissioner, reported.

"The point to remember," Swank said, "is that contestants must register with CRA offices, Plant 1 or 2, and pay their 50¢ entry fee before they go hunting."

All deer killed on the North American continent are eligible. The contest opens Sept. 1 and will run through Nov. 30. Three awards will be made. One for the widest spread, another for the most points, and a combination points and spread.

Winners will have their deer heads mounted free of charge as a prize. Rules specify rifle or archery equipment must be used in bagging the deer. Each entrant is eligible for only one award.

First Ice Skating Session Tomorrow

Ice skating climbs back on the roster of CRA-sponsored activities tomorrow (Sept. 3) when the first Convair night is held at the new Iceland, 6055 Lake Murray Blvd.

Back after an absence of over six months, the activity will be held every week on Thursday evening, 6:30 to 10 p.m. The public will be admitted and general prices will prevail after 8 p.m. Special rates for Convair folk between 6:30 and 8 p.m. are 75¢ for adults; 50¢ for children; 25¢ for spectators, and 35¢ for skate rentals.

Iceland is a full-size rink, 60x120 feet, offering programmed skating sessions and instruction.

Dept. 31 Schedules Annual Park Picnic

Pecan Park will play host to the largest scheduled Convair SD picnic of the year Saturday (Sept. 12) when an estimated 1,600 Dept. 31 personnel attend their annual outing.

Last year upwards of 2,000 attended the departmental picnic. Activities at the park will get under way at 10 a.m., and last until 5 p.m. On the agenda are talent shows, games and prizes for children and adults.

Punch and ice cream will be free. Families can bring picnic baskets or take advantage of low prices on hot dogs and hamburgers at the park. Tickets are being sold in Dept. 31 by shop foremen and union committeemen.

Free Boating Course Starts

With San Diego a leader in the nationwide boating boom, a free piloting course offered by the San Diego Power Squadron which starts the week of Sept. 14 is especially timely.

William F. Presch, senior structures engineer at Convair SD, is commander of the local unit of the United States Power Squadrons. He said the basic instruction course of ten lectures, known as the USPS piloting course, is open to all interested boat enthusiasts at Convair SD without charge.

Topics covered in the course include equipment and government regulations, rules of the nautical road, seamanship, safety afloat, the mariner's compass, aids to navigation, charts and piloting and manners and customs on shipboard.

Registration will be held from 7:30 to 9:30 p.m. at the following locations: Sept. 14, Carlsbad High School; Sept. 15, Helix High School; Sept. 16, Cabrillo School; Sept. 17, Sweetwater Union High School.

United States Power Squadrons is a nationwide association of boatmen dedicated to the promotion of safety, good citizenship and good fellowship afloat.

Picard, Walker Win Pistol Club Honors

Ralph Picard (Dept. 6) and W. G. Walker (Dept. 6) placed in both the police course event and the short nationals at the Aug. 23 Pistol Club tourney, Ash Bishop, CRA commissioner, reported.

In the police competition Picard wound up in second place, behind B. L. Broadway (Dept. 603) who totaled 295 points to win the master class. In the short nationals Picard tallied 262 points to best Jim Halfacre (Dept. 180) and Walker who finished second and third.

In addition to his third place finish, Walker walked off with honors in the expert class, besting Carl Hornburg (Dept. 166). Both tallied 275 points but Walker pumped 10 shots into the tie-breaking "X" circle, five more than Hornburg.

In the sharpshooter class Bill Mentlick (Dept. 406) and Harvey Ingalls (Dept. 6) finished first and second.





PROMENADE—Forty Convair SD Hoedowners graduated from the intermediate class last week. They will now meet with the advanced group at the University Heights location.

CONFERENCE BLDG. LOCATION FOR SD SPANISH CLASSES

Two Spanish classes will meet for the first time during the next two weeks at Convair SD.

A beginners class will meet Sept. 3 from 7-9 p.m. in Room 4 of the Conference Bldg., Balboa Park. Students in an advanced group will assemble at the same time on Sept. 14 in Room 2 of the Conference Bldg.

The instruction will continue on a regular Thursday and Monday schedule for 15 weeks. Under CRA sponsorship, the classes are free to all Convair SD folk and members of their families interested in acquiring a "working" knowledge of the language.

If more turn out for the classes than already indicated CRA will schedule another class to accommodate the overflow. Rules of grammar, syntax and other formal characteristics of the language will not be emphasized, although they will be discussed as necessary.

Teaching the beginners will be Jim Hardison (Dept. 15-1); instructing the advanced group will be Mrs. Elba Peralta, wife of Manuel Peralta (Dept. 6). Both of the instructors speak Spanish fluently and have resided in Spanish-speaking countries for a number of years.

CRA's Stamp Group To Meet Tomorrow

First fall meeting of the Convair SD Stamp Club will be held tomorrow (Sept. 3) at 7:30 p.m. in the Conference Bldg., Balboa Park, Jack Benedict, CRA commissioner, stated. A stamp auction of high-grade material will open the club year.

Hunter Safety Course Slated To Start Soon

A Hunter Safety Course for the children of San Diego and Astro employees opens at 9 a.m. Sept. 12 at the Convair Gun Club rifle range, Gillespie Field. It continues at the same time each Saturday for three weeks.

California law specifies no minor may be issued a hunting license without completing such a course.

CRA is sponsoring the event which is open to both boys and girls capable of taking a written examination at the end of the course. Sessions will include care and use of firearms, plus actual firing under the watchful eyes of instructors.

Parents are urged to attend.

No advance registration is necessary. Participants are asked to bring personal .22 rifles, if they have them. A limited number of rifles will be available for those without. Ammunition may be purchased at the rifle range at wholesale prices.

24 Golf Clubbers Win in Best Ball Aug. 22-23 Tourney

Fifteen golfers from Astro and nine from Convair SD stroked their way into the winner's column in the partner's best ball tourney Aug. 22-23 at Torrey Pines.

Flight One winning teams: Ron Brock and Wayne Boring (both Astro) and A. Simington Jr. and H. C. Van Buren (both SD), tied for first; J. R. Dempsey and H. V. Purnell (both Astro), third; R. T. Parmley (Astro) and J. J. Swarts (SD), fourth.

Flight Two: L. D. Green and Ray Berner (both Astro), first; E. E. Espinoza and G. Belasquez (both Astro), second; E. E. McKenzie and Bob Selle (both SD), third; Les L. Siemers and L. J. Elfers (both Astro), fourth.

Flight Three: Mike Valin and G. G. Baker (both SD), first; R. A. McClernan and G. G. Reid (both Astro), second; H. J. Ferguson and E. G. Farr (both Astro), third; and N. D. Long and F. K. Dorris (both SD), fourth.

SD Archers Start Round Robin Meet

An archery shoot at the Kearny Mesa range on Sept. 6 will be hosted by the Convair SD Archery Club. Registrations will be taken at 9:15 a.m.

The shoot is the first in a series of 10 similar events which will be conducted on a round robin basis on successive Sundays by five local member clubs of the Southern Border Archery Association.



HEY YOU KID!—Peter Aperlo, SD Dept. 6 (on right), was navigator of winning car at recent Photorama Rally sponsored by Astro Sports Car Club. Bill Rector, Astro commissioner, congratulates Aperlo and winning driver, George Kendall (on left).

Chess Tournament Set This Weekend

Convair SD's Chess Club will stage a three-day tournament over the Labor Day weekend (Sept. 5-6-7) at the CRA Clubhouse on Pacific Hwy., Newton Grant, club spokesman, reported.

He said entrants will play a total of six games with two sessions scheduled for each day of the weekend. The afternoon games will start at 1:30; the evening at 7:30.

The competition will be rated by the U.S. Chess Federation and participants must be members of the Federation. Memberships are available through the club.

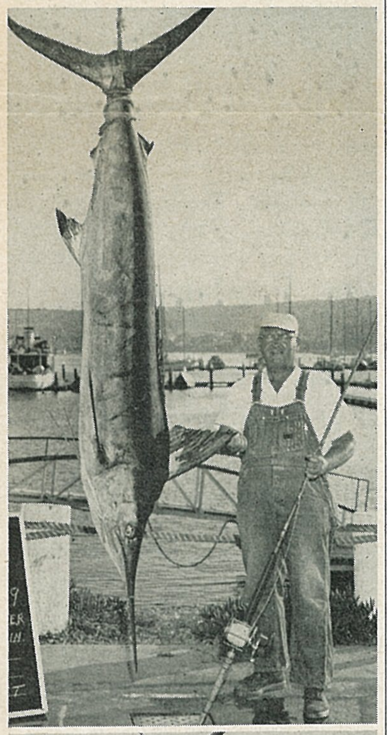
Looking ahead to future club events, Grant said the SD plant championship tourney has been tentatively set for the latter part of September. "Later, we expect to arrange a match between the Astronautics and Convair SD champions," Grant added.

Marlin Club Gets Two New Members

G. R. "Russ" Miller, Beech representative at Rose Canyon, and Gertrude Meyer (Dept. 98-7) on separate outings last month became members of the Marlin Club and both catches were unusual.

Miller accomplished in three hours what some fishermen strive for over a period of years. He caught the 156½-lb. fish on his very first outing!

For Gertrude Meyer the marlin catch was unusual in another aspect. She caught a 109-pounder after a 19-minute tussle. The marlin, first one caught by Gertrude, weighed more than she.





STRUNG UP—G. R. "Russ" Miller, Beech representative at Convair SD, and Gertrude Meyer (Dept. 98-7) last month joined ranks of Marlin Club. Miller caught whopper on first try, Gertrude Meyer's catch weighed more than she. Her husband, Ronald, is at left.

CRA Sports & Recreation Convairiety

Bargain Price Boat Production Starts When Building Completed

Boat builders at Convair SD will be producing 16-ft. boats at the Gillespie Field facility within the next two months and the 22-ft. models are expected to follow soon thereafter.

"We can't pinpoint a specific date for the actual production to start," Dale Cromartie, commissioner, reports. "Some essential work still remains to be completed on the new building.

"Production on the 16-footers could start late this month," Cromartie added. "The boat mold, cabin mold and curing cradle are now in place and the fiber glass supplies will be ordered as soon as we can put them under lock and key."

Preliminary work on the 22-ft. program is also moving along at a good clip. The 22-ft. mold, which was moved into the building last week, is now on display for the first time. Next project planned for the program is the 22-ft. male plug.

All Convair SD personnel will be able to take advantage of the boat building facility. However, Cromartie stressed preference on the building list will be given those who have helped with work on the new structure.

The do-it-yourself price of the boat is usually only one-third the cost if the boat were purchased new.

Approximate price for the construction of a 16-ft. boat is in the neighborhood of $300. A 22-footer will cost the individual roughly $700. The prices vary as the quality of the accessories and hardware vary. But even in this regard discount prices can be obtained for brass fittings, paneling, etc.

Volunteer work on the Gillespie Field building is progressing on Saturdays. An evening shift will be employed if enough sign up. For more information contact Cromartie, ext. 1650, Plant 1.

Bridge Lessons Now Offered At Discount Price

Convair SD folk interested in learning how to play bridge will be able to take advantage of a series of lessons which starts Sept. 10 under sponsorship of the CRA Bridge Club.

A series of 10 beginners classes will meet each Thursday at 7:30 p.m. at the Barcelona Hotel, 4th and Juniper. The instructor will be Mrs. Gladys Hines, director of the Barcelona Bridge Club.

Students will be charged $10 for the course. However, CRA will refund $2.50 after completion of the ten lessons, making total cost $7.50 per person.

Advance registration is not necessary. Students may enroll at the initial session on Sept. 10. Additional information is available by contacting Frank Westphal, ext. 2225, Plant 1.

Westphal reminded club members that there is no time like the present to get their bridge playing ability in top shape for the industrial section of the National Bridge Tournament which will be held at the Hotel del Coronado this winter.

Riding Clubbers Offered Discount

Members of the Convair SD Riding Club are being offered a varied schedule of classes at the Kenmore Stables, accommodating both youngsters and adults, Marc Beresford, commissioner, reports.

The Kenmore Stables (formerly Polo Grounds) in Mission Valley has set up three programs which Convair SD Riding Club members can enjoy at discount prices.

Beresford said riding lessons for children can be arranged for any day except Sunday. Adults can take advantage of a Thursday 2:30 p.m. class and swing-shifters (and the ladies) are offered a Wednesday morning class at 10:45.

The discount can be obtained by displaying the Convair SD Riding Club membership card, Beresford added. To place reservations at the Kenmore Stables call CY-5-5352.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY — Shoot at Kearny Mesa range Sept. 6. Registration starts at 9:15 a.m.

BADMINTON — Open play for families Tuesday evenings at 7:30 in Balboa Park Federal Bldg.

BOWLING — Some reservations still open for fall and winter leagues. Contact Jim Hayman, ext. 1155, Plant 1; or Mike Brooks, ext. 720, Plant 2.

BRIDGE CLUB—Next session Sept. 15, 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CHESS CLUB — Three day tourney over Labor Day weekend (Sept. 5-6-7). Afternoon games start 1:30; evening sessions at 7:30, both in CRA Clubhouse on Pacific Hwy.

CHORALAIRES — Newcomers invited to first rehearsal of season Sept. 14, 7:30 p.m., CRA Clubhouse on Pacific Hwy.

FISHING CLUB — Volunteer help needed to finish boat builders facility at Gillespie Field. Contact Dale Cromartie, ext. 1650, Plant 1.

GOLF—CRA match play championships Sept. 12, 19 and 26 at Flying Hills course.

ICE SKATING—Convair night every Thursday. Discount rates between 6:30 and 8 p.m. at Iceland, 6055 Lake Murray Blvd.

JUDO—Workouts and instruction every Thursday at 7 p.m. in CRA Clubhouse on Pacific Hwy.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Sept. 8—"It Happened to Jane," and "Pork Chop Hill." Sept. 15—"Raw Wind in Eden," and "Secret of the Incas." Admission: adults, 25¢; children, 15¢.

RADIO CLUB — Meeting tomorrow (Sept. 3) at 7:30 p.m. in Harbor Drive headquarters.

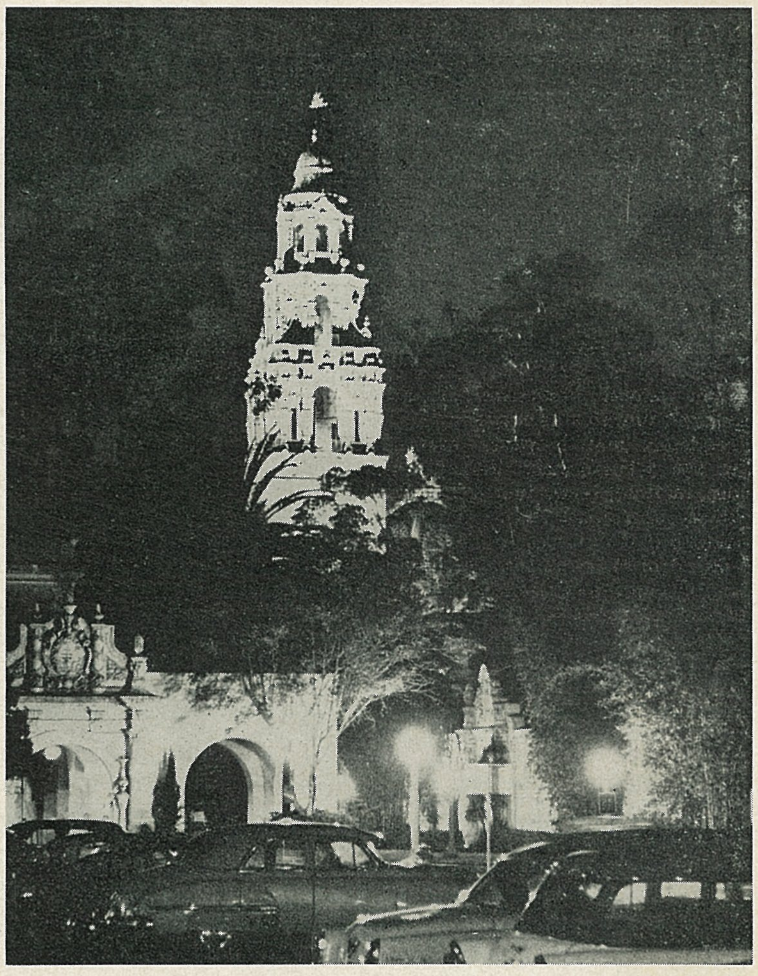
ROCKHOUNDS — Shack on Pacific Hwy. reopens Sept. 8. Next club meeting Sept. 10, 7:30 p.m., CRA Clubhouse, Gillespie Field.

SPANISH CLUB — First of 15 classes for beginners tomorrow (Sept. 3) at 7:30 p.m. in Room 4 of Balboa Park Conference Bldg. First advanced class Sept. 14 at 7:30 p.m. in Room 2 of Conference Bldg.

SPORTS CAR CLUB—Meeting tonight (Sept. 2), 7:30 p.m., Natural History Museum, Balboa Park. Fun Rally Sept. 13, starts from Astro parking lot at noon.

STAMP CLUB — First fall meeting tomorrow (Sept. 3), 7:30 p.m., Conference Bldg., Balboa Park.

WOMEN'S ACTIVITIES—Registration for charm school open until Sept. 18 at employee services, Plants 1 and 2. Tickets still available for fall fashion show Sept. 5 at El Cortez Hotel.



SPECTACULAR—Photo of Balboa Tower in Balboa Park taken by Ron Ainsworth of CRA Camera Club at Convair SD was one of prize-winning entries in "outdoor photography at night" contest. Play of lights on low-hanging clouds sets building off from dark shadows in spectacular manner.

Newcomers Invited to Rehearse As Choralaires Start Season

Convair SD's mixed choral group, the Choralaires, will launch their seventh season on Sept. 14 with a 7:30 p.m. rehearsal in the CRA Clubhouse on Pacific Hwy.

"With early engagements already booked for late October and early November, we want to get this season off on the right foot," W. A. Vogel, director, said last week.

"Membership in the Choralaires is open to all Convair SD people and members of their families. Musical experience is not required and we do not hold auditions or tryouts," Vogel added.

"However, we are asking new members to attend the first rehearsal if at all possible," Vogel stated. "Good attendance during these first few rehearsals will make the job easier and more enjoyable."

The Choralaires were formed seven years ago with the sole purpose of singing together for the fun of it. Since then their program has expanded with the group currently appearing in some 20 concerts and appearances during the year.

Vogel, as director, carries an impressive list of credentials. He was graduated from the Denison Conservatory of Music, did graduate work at Yale, obtained a master's degree from Denver University, and studied music in Paris and Leipsic, Germany. He was also head of the composition department of the University of Arizona for seven years, headed the music department at the University of Alabama for a like period and also taught in Kansas, Colorado and California.

More information on the Choralaires can be obtained by contacting Vogel, ext. 687, Plant 1, or Martha Woodberry, commissioner, ext. 1245, Plant 1. In addition to singers, an accompanist is also being sought.

IRC Table Tennis Hosted by Convair

CRA will host the singles table tennis tourney of the Industrial Recreation Association Sept. 11 at the Municipal Gym in Balboa Park, Pete Beyrer of the CRA office announced.

The tourney will be open to all employees of companies affiliated with the IRC. No entrance fee will be charged and early registration is not required. However, participants must sign up between 6 and 6:30 p.m. the day of the competition.

The tourney will be divided into two classes. Those losing the first round will make up Group B. After the first round, a loss will eliminate the contestant.

Each series will be two of three 21-point games. Trophies will be awarded winners and runners-up in Groups A and B.

Memory Course Offered Again For SD People

Another series of memory classes, at special CRA-reduced prices, will be offered at Convair SD starting Sept. 22.

The instructor will again be Donald Robinson, a professional memory expert. The two-and-a-half hour classes will be held each Tuesday at 7 p.m. in the House of Hospitality, Balboa Park. With CRA sharing a portion of the cost, the individual fee is $10.

The course is broken into such subjects as study habits, numbers and formulas, objects, isolated facts, directions and geography, and a speech without notes.

Among accomplishments students should acquire is the ability to memorize every article, advertisement, and cartoon in a 110-page magazine by the page number in only two minutes per page.

Robinson also claims pupils can meet 20 persons at one time and recall at least 90 per cent of their names.

To confirm reservations payment of fee should be made before start of course at employee services, Plants 1 and 2. For additional information contact ext. 1245, Plant 1, or ext. 656, Plant 2.

Dept. 149 Team Wins SD Handball Tourney

A Dept. 149 handball team came from behind with two victories to defeat a Dept. 15 entry and win the Convair SD plant championship.

Nacho Brocamontes and Polo Pementel edged Harold Dill and Jim Simley 19-21, 21-16 and 21-6. First place and runners-up trophies were awarded by the CRA.

FW Measures B-58 Fatigue In Sonic Test



NEW "STADIUM"—At northeast end of Convair Fort Worth's reservation is new structure that looks something like football stadium. It is being used for sonic fatigue tests on B-58 Hustler. Barrier deflects noise during engine runs.

To make certain that the B-58 Hustler doesn't get too "tired" from the incessant "yak" it gets from its jet engines, Convair Fort Worth last month began an exhaustive sonic fatigue test series.

The metal structure of the aircraft vibrates as result of high frequency sound waves created by the jet engines. The vibration, in time, tends to weaken the metal—and could result in parts requiring maintenance.

To find out which parts might be affected, tests are being run in an outdoor sonic test chamber at the north end of the reservation. Team captain John Ballentine of structures dynamic acoustics says it's actually a part of the structure certification program.

The Hustler, modified with help of design engineer Mark Kite, is placed in a position engineers calculate minimizes noise disturbance both at Convair and the surrounding area.

The two inboard engines are run up while engineers take readings with special instrumentation to find out how much fatigue is induced at various points in the structure.

The tests are run on the ground because vibrations are even more severe than when the Hustler is in flight.

Ballentine said all sorts of instrumentation are used. Microphones and strain gauges are attached throughout the aircraft to insure maximum vibration pick-up.

"With the data we collect, we can make certain that we'll not encounter any fatigue problems later," Kite added. "This will help us in preventing maintenance problems such as the Air Force has encountered with other operational bombers."

There are inspections after each run period, but the first major inspection will come after the end of five hours of run time.

The modified Hustler is nestled inside a specially built sound barrier. The barrier is 50 feet long on the south side and 250 feet long on the west. It is 32 feet high.

This deflector helps protect nuclear people and others nearby from the jet engine noise.

Ballentine said tests will last until the first of the year. The B-58 guinea pig will then be converted for tactical use.

Others working on the project include Bruce Gentry with the electrical and electronics system, Carmen Deluca with the mechanical system and Weldon Walker acting as test lab coordinator.



COOLER—H. D. Prince (SD Dept. 31) tightens outer case cover of radar receiver-transmitter unit before it goes into high altitude chamber for test of cooling system at Convair SD thermodynamics lab.

Water Cooling System Applied To Combat Heat of Fast Flying

A built-in cooling system effective enough to keep delicate radar equipment from burning up as it flies through space in supersonic vehicles is under development by Convair San Diego researchers.

A Convair-developed evaporative-cooled radar receiver-transmitter unit is now undergoing preliminary testing at the SD thermodynamic laboratory testing site at the seaplane ramp.

The unit is being checked out with the evaporative-cooling method as a satisfactory means of keeping a plane's radar receiver-transmitter workable at supersonic speeds.

Maximum conditions attained under tests will simulate altitudes of up to 75,000 feet and Mach 3.2 speeds for 15 minutes duration, explained H. O. Story, assistant electronics project engineer.

Electronics sub-department of SD engineering has been working on the cooling system for the last three years under research and development contracts from the U.S. Navy.

First investigation began under a two-phase 1956 contract. The cooling system, in first stages of development, included preliminary cooling by "ram" air, or normal intake of outside air through ducts at subsonic speeds, then an automatic switch-over to water cooling at higher speeds. The early method provided for a mixture of a small amount of air with water.

Present work going ahead under a 1958 follow-on contract calls for effective modification of the same type unit for use at extremely high speeds, and consequently, higher temperatures.

About one gallon of water is stored in the unit to be used during the 15-minute elapse of time at critical heat point, when temperature of air intake is approximately 650 degrees F.

During the last year, in preparation for testing, various types of materials have been under scrutiny to determine those most suitable for insulation of the unit and for use as lining of the radar compartment.

Besides development and testing of the radar receiver-transmitter unit with increased temperature capability at no increase in weight, present work is going forward on erection of a simulated plane radar compartment for similar tests.

Completion date is set for June of next year, although, if tests proceed as smoothly as anticipated, it is probable that the Convair SD-developed unit will be proved out earlier, predicted Story.

FATHER-DAUGHTER TEAM WILL RIDE IN FIESTA PARADE

For the fourth year a Convair San Diego man and his daughter, garbed in the fanciest of matching Spanish costumes, will be eye-catchers in the annual Fiesta del Pacifico parade next week (Sept. 7).

Bruce White of Dept. 3-1 and his 15-year-old daughter, Cynthia Ann, will be riding matched red and white paint horses and wearing peacock blue costumes designed and made by Mrs. White.

Also a Convair SD employee of Dept. 280, Lou White has been frantically working long hours at night to finish attaching the 10-gross of rhinestones which trim Bruce's jacket. She has been working on the new outfits for the last three months. Lou has designed and made all of the costumes worn by the couple in their many parade appearances.

Cal-Western Enrollment Shows Gain

Convair SD and Astro Divisions are beginning their fourth year of cooperation with California Western University in a manage-development program.

Registration dates for the fall semester are Sept. 14, 15, and 16 at the University's downtown campus, 1729 Fifth Ave. Classes begin Monday (Sept. 21).

Convair-paid tuition has been arranged for 280 SD and 94 Astro supervisors and non-represented flat-salaried personnel.

Inaugurated in 1956 to increase supervisors' opportunities to improve themselves, the University offers certificates in industrial management, business administration, finance, accounting, and personnel-human relations.

Some 212 Convair students attended last semester with 162 working toward certificates and 44 toward a bachelor's or master's degree. SD Division had 122 participants and Astronautics, 90. Some liberal arts classes are approved if they are applicable to the individual's classification or to a degree or certificate.

Eligible night-shift people may enter day courses at the Point Loma campus if working arrangements make attendance possible throughout the entire semester.

To register under the Convair-Cal Western program, SD and Astro applicants must obtain forms from the educational services coordinator of each division. D. G. Walton, ext. 1671, Plant 1, is in charge of San Diego Division registration, while Astronautics personnel may contact J. J. Block, ext. 1936 at the Kearny Mesa site.

Application deadline is Sept. 9.



ATLAS VISITOR—Famed air pioneer and designer Maj. Alexander de Seversky was a visitor at Astronautics facility AFMTC, recently. From left, Lt. Col. H. P. Cannon, de Seversky, B. G. MacNabb, Astro base manager, Capt. C. J. Gory.

Miramar Air Show to Feature 880, Atlas, Tartar, Terrier

A Convair 880 jetliner, Atlas missile, and models of the Terrier and Tartar will be major attractions at the Miramar Naval Air Station Open House and Air Show on Saturday (Sept. 12).

Over 200,000 persons are expected to attend the all-day event. For the great majority it will be their first up-close look at the Convair products.

Other major aircraft companies in the Southern California area will also have products on display, most of them conforming to the theme of naval aviation and guided missiles.

The Air Show will be a featured event of the Fiesta del Pacifico. Gates at the air station will be open from 8 a.m. until 6 p.m. No admission will be charged.

Also on static display will be Navy aircraft currently operational with the Pacific Fleet. Other events on the program include a flight demonstration of World War I aircraft, an aerial circus, and parachute sky divers.

The show will be climaxed by the precision formation flying and professional aerobatics of the U.S. Navy flight demonstration team, the Blue Angels.



INSPECT 880—Western Airlines officials visiting Convair San Diego recently were (from left) Frank Vosepka, inspection superintendent; R. B. Ault, director engineering; J. W. Duggan and J. G. Zevely of Convair commercial sales; W. D. Carrier, SD production flight pilot; S. R. Shatto, WAL vice president, operations; H. W. Caward, director flight operations; and S. J. Cavill, system chief pilot.

Astro's Management Club Will Resume Monthly Gatherings

Convair Astronautics Management Club, idle for the past two months, resumes monthly meetings Sept. 17 with a gathering at the Palm Room, U. S. Grant Hotel.

Earlier this year members voted to suspend meetings during the peak vacation period, July and August. The September meeting will mark the opening of a 10-month program under the direction of a new slate of officers.

Speaker for the September meeting will be Dr. Kenneth McFarland, educational director of the American Trucking Association and a consultant to General Motors.

During the meeting missile-men-of-the-month will be honored for July and August, according to the sponsoring manufacturing control department.

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



PARTING COMPANY—Main stage of Atlas falls away in this remarkable photo, taken at about 200 miles up. Movie camera was installed in recoverable capsule carried in missile nose cone. General Electric designed both nose and recovery capsule. Film shows about one-sixth earth's surface, including portions of North and South Americas and Africa.

AF Atlas Launch First of Series From Vandenberg

Headlines across the nation and abroad last week proclaimed the first Air Force launching of an Atlas missile from Vandenberg AFB, Calif.

Already in motion are plans for future launchings by other Air Force crews.

Sept. 9 saw a Strategic Air Command crew from the 576th Strategic Missile Squadron send Atlas 12-D on a 4,300-mile flight which terminated near Wake Island.

Capt. Gerald J. Winchell, launch control officer for Crew No. 1, pressed the launch button at 10:49 a.m. Around him in the blockhouse were other members of this crew, plus select Convair technicians to assist as needed.

Gen. Thomas Power, SAC commander, reported elation in the event at a post-flight briefing.

"It's operational; I'm more than satisfied," General Power said.

Asked by reporters if the shot was entirely military, General Power answered in the negative.

"It was a mixture of science, industry, ARDC, AMC, Convair and the SAC team working together to fire the missile," General Power said.

"You are never divorced from industry. It is still a team play. The weight of responsibility shifts, but no one does it by themselves."

General Power also told reporters that SAC hopes to launch a missile for each of its crews from Vandenberg prior to the time they complete their training and move on to operational assignments at bases across the country.

Crew No. 1, as well as many other Air Force crews awaiting their initial Atlas firings, spent considerable time at Convair Astronautics, builder of the Atlas. First, each man was trained in an individual skill. Later, these skills were welded together in further training to make a compact team.

New High Speed Parts System Put in Effect

A new, streamlined system for ordering spare parts has gone into effect at San Diego and will back up the advance of the Convair 880 and 600 into the jet age.

Over two years in development, and called the most advanced in the industry, the system will be unveiled publicly at a special airline operator and supplier seminar Sept. 22-23 at San Diego.

In brief, it employs a punched card communication arrangement between airlines and Convair SD, and a "transceiver" system that duplicates the cards almost instantaneously for distribution to Convair departments concerned.

For example, a card is received at SD service parts (Midway and Fordham) from an airline. Punched holes on the card give all the information Convair needs to fill the order. The card is placed on an IBM machine which is connected up with two other machines, one located at Rose Canyon and the other in tabulating in Bldg. 8, Plant 1. The machine, in an instant, reproduces duplicates of the order at the other two points, and steps can be taken at once to meet requirements.

First orders from Delta Airlines are already speeding through the communication hook-up.

John Doig, chief of service

(Continued on Page 2)

Bloodmobile Visit Sept. 24 at Plant 1

Next bloodmobile visit at Convair SD will be Sept. 24 at Plant 1.

All engineering, experimental, and tooling personnel in Bldg. 5 on first shift will be signing to donate blood, said Ken Wulfemeyer of SD employee services.

First-shifters at Plant 2 boosted Convair's credit at the San Diego Blood Bank by 144 pints during the August visit. Out of 236 who signed as volunteers, 40 did not report and 52 were rejected.

Three Bands to Play For SD Club Dance

Stardust Motor Hotel at Mission Valley Country Club will be the setting Sept. 26 for the annual semi-formal Fall Dance of the Convair SD Management Club.

Continuous music will be provided with three bands playing for dancing throughout the evening. Music starts at 8 p.m., dancing from 9 p.m. to 1 a.m.

Tickets for the "Stardust Ball" are now on sale at the usual departmental outlets. Priced at $5.50 per couple, they include a buffet dinner, raffle and prizes.

Atlantic 'Outfielders' 'Catch' Cones, Capsules

A unique air and surface "fishing fleet" patrols the South Atlantic these days, and the catches they haul aboard are from "out of this world."

Known unofficially as "outfielders," the fleet retrieves nose cones and data capsules from missiles fired at Cape Canaveral, Fla., over the Atlantic Missile Range. Prominent among the recoveries have been those propelled southward into the shark-infested waters off Ascension Island by the Air Force's Convair-built Atlas.

Most recent was recovery of a capsule from an Atlas missile fired Aug. 24 which contained about 10 minutes of amazing 16 mm moving picture film. The movie charted the nose cone's progress up to 700 miles high.

Recovery is a joint effort of AFMTC's 6555th Operations Squadron and "ocean range" vessels operated by the Suwanee Steamship Co. for Pan American World Airways. Ocean vessels and aircraft are pre-positioned near the expected impact area before a missile launching. They follow the countdown by radio. After launch, it is possible to predict the arrival time of a reentry vehicle within seconds. For example, it takes an Atlas flying its 5,500 nautical mile course about 30 minutes to deliver its nose cone.

As the missile re-enters the earth's atmosphere it is tracked electronically. Frequently, aircraft make visual sightings of the impact point and radio the position to the nearest surface ship. Or, the planes may drop smoke flares and circle the spot.

Meanwhile, aboard the fast-flying "bird" a series of carefully sequenced events takes place automatically, making recovery possible. On the Atlas, the booster section first falls away. Then the re-entry vehicle (nose cone) separates from the main body and moves ahead of it. Later

(Continued on Page 8)

New Materials Require Intense F-108 Training

Faced with the problem of teaching Convair SD employees entirely new concepts of production as preliminary work gets under way on the F-108 wing, Convair SD educational services is in the midst of organizing a new program of specialized classes.

"New materials and new techniques developed for construction of the trisonic, stainless steel interceptor have made intensive training imperative for all workers involved," explained H. W. Rubottom, SD chief of educational services.

Beginning with the handling of material—No. 1 problem in use of the comparatively soft metal—a complete series of training classes is being formulated to cover every step, from the time the material is received until the finished product rolls off the line.

"Because of the revolutionary processes and materials to be used in the new plane, we are gathering information from every available source," said W. H. Goggin, assistant supervisor in charge of the training program at Plant 2 where F-108 activities are under way.

Men from other Convair divisions, including Astronautics, Fort Worth, as well as from other companies such as North American Aviation, Inc., Rohr Aircraft Corp., Ryan Aeronautical Co., and Solar Aircraft Co. have been assisting in an advis-

(Continued on Page 2)



PUNCHED—First spare part orders for 880 from Delta Airlines, speeding through new IBM transceiver network at Convair SD, are examined by (from left): Truman Elliott, service parts superintendent-administration; Jim Hardison, assistant service parts supervisor; and Jack Laird, sales control representative. Operating IBM 026 is Ethel Sicardi (Dept. 15).

Customers to Get Fast Service on Spares With New Punch Card Setup

(Continued from Page 1)
parts at Convair SD, said some 200 representatives of both overseas and domestic airlines, representatives of Convair vendors, other Convair operating divisions, and Air Transport Association executives are expected to attend the two-day seminar.

The mechanized spare parts order handling program is set up now for the Convair 880 and 600, Doig stated, adding that by the end of the year the system will be extended to handle parts processing for twin-engine Convair Liners as well.

The program is one of the first in the aircraft industry and is believed to be the most advanced for in-plant processing of orders.

Harold Wolfe, general supervisor of service parts, said over 12,000 different spares items for TWA and Delta have been ordered or are being maintained for the 880 and 600 inventory.

He said the streamlined program is an adaptation and elaboration of Specification 200 as recommended by the Air Transport Association. (Spec 200 is a standard established by the Association to facilitate spare part procurement and supply transactions between airline operators and manufacturers.)

The IBM transceiver method alerts all departments and functions concerned with the processing of an order almost as fast as the key punch cards can be put into the machine.

Groups and functions that play vital roles in the processing of orders are spares stores, shipping, cost accounting, general accounting, data processing, manufacturing control and purchasing department.

"The importance of the program is appreciated when it is realized that the spare parts needed to maintain the lifetime flying capability of six airplanes would just about make a seventh plane if they were put together," Wolfe stated.

"However, from all indications available now concerning the 880, our inventory will be much smaller than one would expect necessary for such a plane. But it must be remembered that flight after flight, day in day out, places strain on an aircraft and some parts will undoubtedly start wearing from sheer use," Wolfe stated.

"Also, it doesn't take much to ground a plane. A minor detail, such as the 'Fasten Seat Belt' sign failing to go on, could idle a $4 million plane."

Wolfe said an important aspect of the service parts job is to foresee what parts will be needed to maintain the craft.

Under the present setup an order from an airline operator can be expedited in less than 12 hours after receipt of the request. Even routine purchase orders can be processed in 15 to 20 per cent of the time formerly required.

Saving of Over $85,000 Yearly Gained by Resharpening Files

Blunted files, worn dull from use, are getting "new life" at Convair SD with a special resharpening process that will net Convair savings of $85,336 annually.

W. R. Bruce, manager of material, said the change in procurement practice uses a patented, hot liquid honing process that allows files to be resharpened as many as 14 times before being discarded.



"FILED AWAY"—Pretty Evelyn Hooton (Dept. 407) holds two files that have been resharpened. In boxes are blunted and worn files, ready to be sent to vendor for "new life."

Compared to the cost of new files, a saving of approximately 85 per cent will be realized each time a file is resharpened, Bruce stated.

Cutting edges are restored by placing files either manually or automatically in special machinery in precise attitude to high velocity steam and abrasive jets.

The new system was put into effect after a study made by the procurement research section showed that the quality of the resharpened files compared favorably with the new — and at a substantially reduced cost.

Files are crated in wooden boxes for shipment, as many as 950 in each. In addition to restoring cutting edges, the vendors clean files and at same time mark those which are not worth repairing anymore.

Assisting in the study of the vendor's engineering processes and methods was the manufacturing development and process specifications group under F. A. Monahan.

In addition to the saving in the area of perishable tooling overhead, intangible cost cuts will also be realized, such as reduced warehouse storage space, handling, etc.

COGGAN TO SPEAK FOR HOLLOMAN CLUB

B. F. Coggan, SD Division manager, will be principal speaker at a meeting of the Convair Management Club at Holloman AFB, N.M., Sept. 23. Also attending from SD will be D. C. Wilkens Jr., industrial relations manager, and P. M. Prophett, assistant chief engineer, flight test.

★ Convairiety ★

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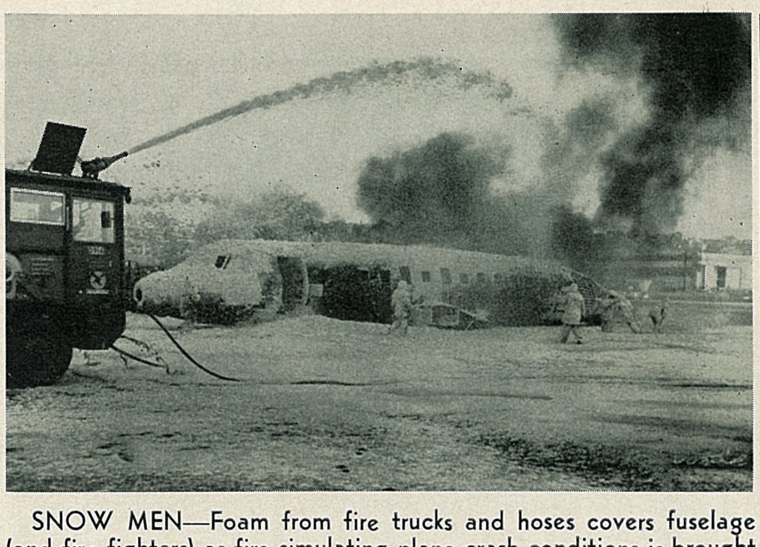
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SNOW MEN—Foam from fire trucks and hoses covers fuselage (and fire fighters) as fire simulating plane crash conditions is brought under control in minutes.

Firemen Ignore Walls of Flame To 'Rescue' Pilots in Fuselage

Convair SD firemen walked through walls of flame and smoke 100 feet high in a crash rescue demonstration before 200 spectators last Wednesday.

Fire chiefs and personnel from fire departments throughout San Diego County and nearby military bases saw Convair SD firemen, in a matter of seconds, con-



"HOT SEAT" — Coast Guard helicopter eases into billowing blaze to beat down flames with down-draft from rotors.

trol fires simulating plane crash conditions.

A Coast Guard helicopter, piloted by Lt. L. I. Levy, showed how the down-draft of the 'copter's rotors can batten down flames long enough for fire fighting equipment to arrive on the scene. As flames shot up from sheets of burning gasoline and jet fuel, the helicopter was eased sideways into the inferno to hold down the blaze long enough for a pilot to be rescued while Convair SD firemen smothered the flames with streams of dry chemical powder (Ansul).

Second event saw gas and jet fuel poured around a Convair Model 340 mockup fuselage containing highly inflammable material such as wood and electric wiring. As black smoke billowed aloft to blot out the sun, Convair SD crash trucks and firemen played streams of foam on the blazing fuselage. Two dummy "pilots," each weighing 160 lbs., were pulled from the cockpit in 35 seconds and another "rescued" from where he might have been thrown outside the plane in a crash. The fire in the fuselage was brought under control within two minutes and the whole area cleared of last remnants of the blaze in seven minutes as the firemen worked in teams. One man is always protected by two behind him.

Lt. D. D. Dimmitt, fire training instructor, clad in a Fyrearmor protective suit, walked through walls of flames over 100 ft. high four times, showing how a man could go into a crash fire to bring out survivors.

Displayed before the demonstration were the six pieces of Convair SD fire fighting equipment including the command car which holds the First Aid and rescue equipment; Convair Foammaster; two O-10 Air Force-furnished trucks assigned to Convair during the F-106 program; Convair's 1,000-lb. Ansul truck; AF-furnished 750-lb. carbon dioxide truck. The company ambulance stood by throughout the events.

F. G. Merritt, chief of industrial security, explained different phases of the demonstration over the loudspeaker and gave special credit to the cooperation of the U.S. Coast Guard for the use of the helicopter as he introduced Cdr. Walter Curwen, executive officer of the Coast Guard.

Convair SD's fire department is under direct supervision of I. K. Wisley, who succeeded H. C. Lyter as fire chief last May.

Jim Kelley Retires

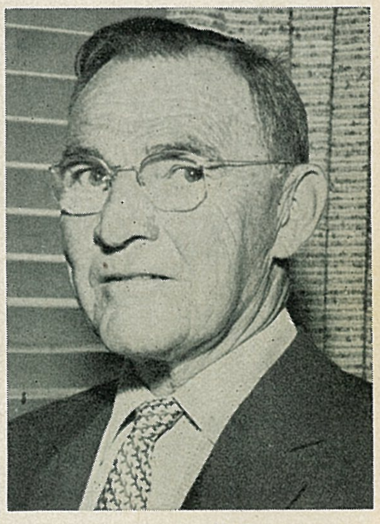
James L. "Jim" Kelley, executive staff assistant, retired early this month after 28 years with Convair.

Kelley, who served as San Diego Division manager during the war years, said he and his wife would "take it easy, travel, and do all the things we have wanted to do."

After joining Consolidated at Buffalo in January, 1929, Kelley made the move to San Diego as factory superintendent and in March, 1942, became assistant to the vice president.

As manager he directed the San Diego Division between 1943 and '47, then left the company to assume the position of works manager at Ryan Aeronautical Company.

He returned to Convair in 1950 to handle special assignments for the San Diego Division.



James L. Kelley

Delta Airlines Men Attending Customer Training at San Diego

The first delegation of Delta Airlines men to take 880 maintenance training courses, completed their first class last week at SD.

Here from Atlanta, Ga., headquarters of Delta Airlines, and the company's line stations, all east of Dallas, Texas, 44 instructors, foremen, supervisors, and maintenance men will have completed SD customer service training classes by the first of next month.

The group was divided into two sections with half completing the three-week systems and structures course which ended last Friday, and the rest still enrolled in the six-week aircraft systems course. Twenty more Delta people were due here this week for the electrical and electronics systems course. In addition, three Federal Aviation Agency representatives have been taking the classes.

All of the Delta trainees are having two hours each in the cockpit procedures trainer with SD production flight department furnishing instruction.

J. M. Boxley and W. L. Sumners, Delta coordinators, expressed their enthusiasm for the Convair SD program. They said, "Convair's customer service instructors have been extremely cooperative and have given us every conceivable help. We believe that the training aids are the best we've seen for the purpose. The study guides are most satisfactory, handy to use and full of information."

The same courses will be repeated at Atlanta this fall by six Convair SD's customer service training staff members.

New Materials Require Training Program For F-108 Personnel

(Continued from Page 1)
ory capacity.

L. E. Cook of Plant 2 educational services will coordinate the program which will see everyone having contact with F-108 wing work taking some type of training. Courses will be given for specific operations to teach proper fabrication and assembly techniques.

So far, over 200 Convair SD people have attended material handling classes which began this summer at Rose Canyon and Plant 2 under direction of H. E. Gettel. All F-108 workers are learning careful handling procedure of the stainless steel which must be kept surgically clean at all times, before and after brazing.

N. P. Pearson, general foreman in charge of the factory portion of the F-108 wing program, has conducted a familiarization class for 190 supervisory and other key personnel.

A series of lectures on welding techniques has just been completed for more than 300 Convair SD design engineers who were joined by supervisory, factory, inspection, and tooling men. Concluding the course last week were talks given by vendors who will be supplying materials and welding equipment: Armco, Allegheny-Ludlum Co., Sciaky Bros., Air Reduction Pacific Co., Linde Co., and Airline Welding and Engineering Co.

To start, probably within a month, will be fusion and resistance welding courses for 130 people at Plant 2 under direction of R. J. Gallagher, experienced in the field. He recently joined Convair SD educational services following several years' experience at Ford Motor Co. in Chicago, Ill., and Solar Aircraft in San Diego.

"We are sure that the training program for F-108 wing work will prove vitally important," said W. S. Stroud, who directs the F-108 wing program. "Because of high cost of materials to be used and the extremely close tolerances involved, it is absolutely necessary that every person join in the effort to keep costs down and to produce a high quality product on schedule."

'Free' Benefits Cost Convair Each Year

(Following are some of the benefits enjoyed at Convair. Where possible, exact figures of 1958 cost are given. Other figures are approximate.)

For Vacations:
$15 1/2 Million

For Holidays:
$12 Million

For Sick Leave:
$5,639,257.

("Direct" employees alone.)

For Rest Periods:
$9 1/4 Million

For Shift Bonus:
$4 1/2 Million

For Retirement:
$14,394,871.

For Insurance:
$5,206,398.

(This was the cost to Convair in 1958 for employee group insurance, over and beyond contributions of employees.)

On-Job Insurance:
$750,000.

Social Security:
$5,930,502.

(Employees paid a like sum, which Convair matched.)

It Might Interest You To Know...

For your "Off-the-Job" Disability Insurance
YOU pay $36 a year.

As required by California law, Convair carries what is technically called "Unemployment Compensation Disability Insurance" but is usually known as "off-the-job disability."

This is to provide a certain amount of income to those whose regular income has stopped as a result of a disabling accident or illness NOT connected with their occupation.

To finance this protection, California requires deduction of one per cent from the first $3,600 earned by an employee each year. Some companies pay this to the California Department of Employment, which pays it out as disabled employees qualify. Others, such as Convair, administer their own. In Convair's case, the funds are turned over to the Aetna Life Insurance Company for actual disbursement.

The one per cent of the first $3,600 earned (which amounts to $36) is deducted from pay checks one per cent at a time. For example, if gross weekly earnings are $100, then $1 is deducted each week until $36 has been reached, at which time the deduction ceases until the following year.

Funds so obtained are used to pay weekly compensation to employees who have been disabled away from their jobs. The California State plan requires a seven-day waiting period before becoming eligible for checks. Convair's plan, however, reduces this period to three days if confined at home. If hospitalized, there is no waiting period.

This is an important point, for by far the greatest number of disability cases are in the one week to 10 days category.

Weekly payments to disabled employees in California vary from $40 a week minimum to $50 a week maximum, depending upon pay or salary grade.

When an employee is injured to a disabling degree, or too ill to work, he or his family notifies employee services, usually by telephone. Insurance claim forms are sent to him and when received back other forms go to the attending physician for verification. Ultimately the disability checks are mailed directly to the employee.

For example, an employee is injured on a Saturday and confined to his home, disabled. His three-day waiting period would end on Tuesday and technically he would be eligible for a check a week from then. As a practical matter, due to time required for processing and mailing, it usually takes about two weeks from the time of disablement until a check is actually received.

However, if instead of being confined at home, the employee is taken to a hospital, there is no waiting period and technically he becomes eligible for a check a week hence.

Weekly checks continue until the employee is back to work, or until the maximum of 26 weeks is reached. In the comparatively few cases that reach this limit, the severity often indicates indefinite disability. If the disability is decided upon as total and for life, then the employee is entitled to his full life insurance payment, at that time, if he is under 60 years of age.

'Satellite in Orbit' And Pappy's Proud

A novel birth announcement, reflecting the times, was reported at Vandenberg AFB by Frank R. Train of Astro's operation there.

It went like this: "New Satellite is in orbit — name: Rebecca Lee; launch area, Sister's Hospital; launch date, Aug. 22; test conductor, Dr. Clifford Case; launch engineer, Virginia Train; design engineer, Frank R. Train; specifications, 8 lbs., 1 and ¾ ozs., 21 inches.

Broken Bottle Results In $400 Injury to Foot

Accidents in and around the home far outflanked all others involving Convair SD employees during a two-week survey period last month at San Diego Division.

These Could Happen To You

There were 68 of this variety (which cost Convair $4,110.-92 in group insurance medical bills) as compared to 15 accidents suffered in sports or recreation (cost $719) and 10 auto accident injuries ($1,412-.65).

Although the auto injuries produced the most expensive single case, both in time lost and medical bills ($600 and an estimated five weeks off the job) one unusually severe home accident was not far behind. This involved a badly lacerated foot suffered when the employee dropped a five-gallon water bottle. His estimated time off the job was six weeks and medical bills were estimated at $400.

Still another home accident, one involving a power saw, took a severe toll in pain, time off (four weeks) and medical bills ($350).

Falls, trips, stumbles and slips continued to lead in numbers of home accidents. There were 27 in this category, two falls "over a dog," an $85 broken ankle suffered at a curbing, another fall down church steps, one hurt back in a shower fall ($110, five weeks off job), one $92 tumble from a tree, and a $68.75 slip on a wet kitchen floor. Tripping over a rock cost one employee three weeks off the job and cost Convair medical bills of $150 for a broken arm.

Strains and sprains also were fairly prevalent (one wrist sprain while doing hand stands!) with the majority associated with lifting too-heavy burdens.

One rather unusual home accident involved "walking into a door." It was rather serious, too, resulting in concussion, a week and a half off the job and bills of $88.50.

Sports injuries seemed to be falling off, despite the fact that this is normally the season. The most serious was a $156.50 knee injury at the beach, followed by a strained spine suffered in a fall while hunting. One employee suffered second and third degree burns from the sun at the beach and was off two weeks. The rest were comparatively minor slips and strains while swimming or taking part in various sports.

Thankfully, most of the auto accident injuries were comparatively minor, such as a nose fracture suffered when a car driver stopped too abruptly ($75) but there was one other both serious and expensive. This took place when an employee's motorcycle went out of control on Highway 80. The rider suffered several fractures and the medical bill was $343.

Steam Scalds Face, Glasses Save Eyes

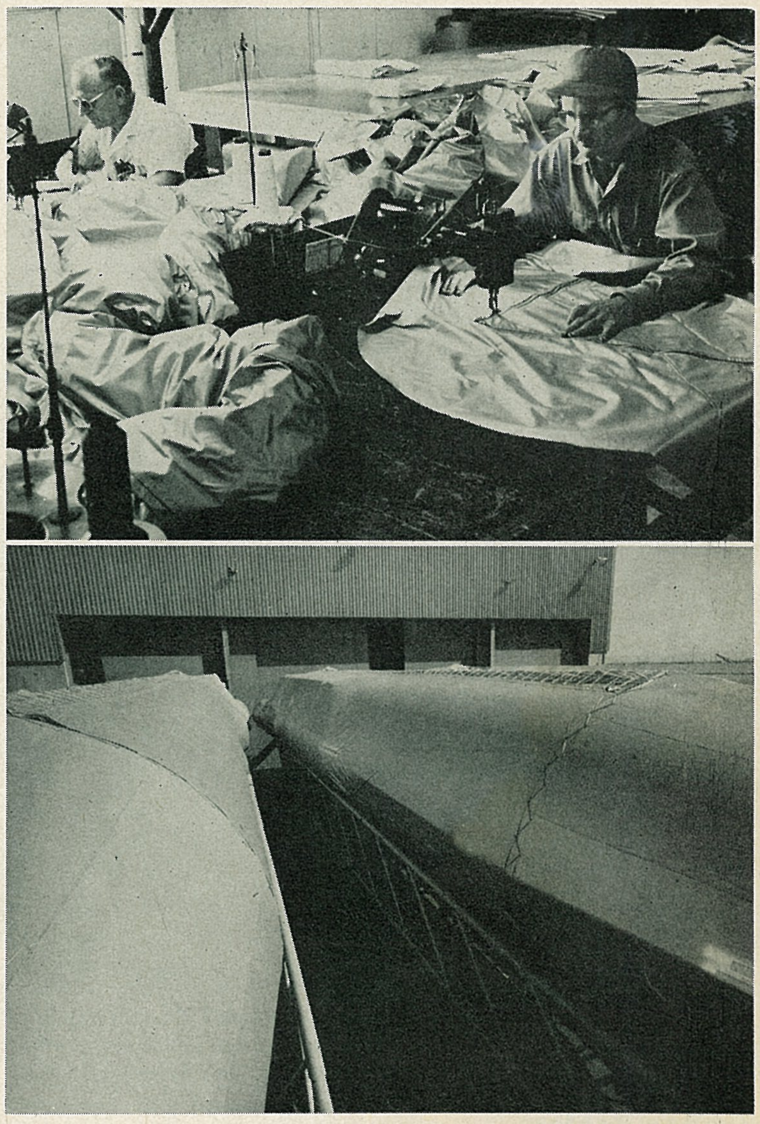
Al Striplin (Dept. 324-8) credits a pair of safety sunglasses (available for purchase through Convair Palmdale safety section) with saving his eyes from injury.

Striplin suffered first and second degree burns recently when he unscrewed the radiator cap on his car. A burst of steam scalded his face. He was treated for burns on the forehead and upper cheeks but the area around his eyes was completely protected by his glasses.

'The Head Is Kinda Round ... It Has Your Brain in it . . .'

(Following is the work of a 5th grade student and deals with the parts of the human body. Convair safety sections point out that these parts of the body need to be taken care of, because it's hard to get replacements.)

"The head is kinda round and hard, it has your brain in it and hair on it, your face is on the front of it, that is the part you eat with and make faces with. Your head sits on your neck, it is what keeps your head from falling down in your collar and it is hard to keep clean, it is between your shoulders, they are shelves that stick out and hold your suspenders and your arms are on the end of them, they are what you use to pitch with and to reach the butter, and you have fingers that stick out of your hands so you can throw curves and add up arithmetic. Your back is always behind you, no matter how fast you turn around. Your backbone is what keeps you from folding up in the middle. Your legs is what if you've got only two of you can't run very fast and they have toes on the end of them that stick out and always get stumped. That is all there is of you except what is on the inside and I never did see that."



TIGHT FIT—New style shrouds for Atlas missile are being sewed in upper photo by W. A. Swanson and A. H. Crossley of SD experimental. Zippers are provided for access at key points. Below, note how tightly they fit. Finished product takes 400 yards of material, weighs 200 lbs.

When Atlas Goes Afield Curves Preserved by Tight 'Girdle' and 'Bra'

A new type of covering, product of the design tables at Convair Astronautics and the production tables at Convair San Diego, is being used for all series "D" Atlas missiles.

This covering, called a protective shroud or security cover, is used to encase Atlas missiles whenever they leave the Astro security confines. This ranges from a simple transfer between the Astro plant and Sycamore Canyon test site or Plant I, San Diego Division, to cross-country treks to the Air Force Missile Test Center in Florida and other points.

Earlier shrouds were designed by Astro engineering to serve two purposes. First, they were to distort the actual missile shape. Too, then as now, they were to protect the Atlas from the elements. The former was possible through the use of special framework units fore and aft which made the Atlas look like anything but a streamlined weapon system.

However, publicity releases of the Atlas have revealed its actual configuration so that shrouds for the "D" missiles need only to serve as protective coverings.

The result is a streamlined covering which fits the Atlas like a fine glove or corset.

It consists of four major parts. First, there is a section to cover the nose area which slips on like a glove. Next are two pieces, top and bottom, for the Atlas tank section. Completing the arrangement is a section to cover the thrust or booster section.

Equipped with grommets, these various sections are laced together and drawn tight, much the same as lacing a shoe.

Astro's handling equipment design section of engineering designed the present shroud. It is being manufactured by San Diego Division's experimental factory.

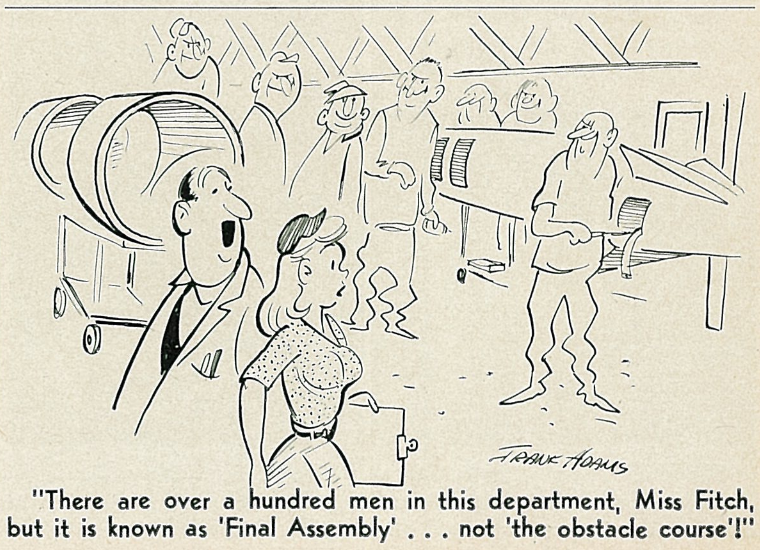
The experimental factory receives material in large bolts. It is two and one-half ounce nylon covered on both sides with a coating of vinyl plastic, bringing the material weight to eight ounces.

The material is stretched out on long tables, then covered with stencils cut to patterns. Spray guns outline the pattern onto the material and necessary cuts are made. To make the final four-piece shroud, 14 different pieces are cut.

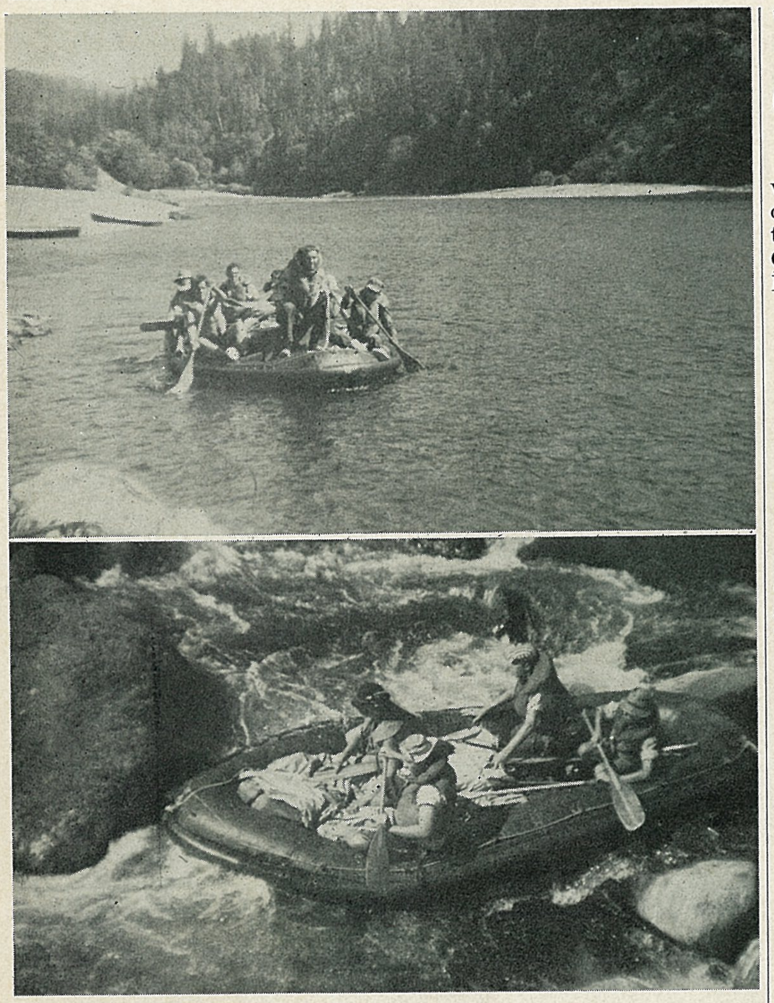
Regular commercial sewing machines stitch the material into finished sections. Grommets are added along the edges.

Approximately 400 yards of material are required for each shroud which weighs about 200 pounds when finished.

For ready access to vital points, special zippered sections are included in the nose area and extreme aft end of the covering.



"There are over a hundred men in this department, Miss Fitch, but it is known as 'Final Assembly' . . . not 'the obstacle course'!"



ROGUE RUNNERS—Attitude of river ranged from tranquil to turbulent as Convair SD sons braved rigors on eight-day journey down Rogue River. Not a few boys bounced overboard.

Rubber Boaters

Oregon's Rugged Rogue Tamed By Teen-Age Explorer Scouts

An eight-day journey by boat down the rugged Rogue River in southwestern Oregon ended late last month when 22 Convair SD teen-age boys and four adult advisers successfully completed their 102-mile route.

Usually traversed only by professional rivermen guiding tourist parties, the Rogue yielded the mystery of its rapids, shoots, and falls to the energetic onslaught of Convair SD's Air Explorer Squadron 340.

Along the way the "river rats" shot rapids, panned gold, "parked" boats high and dry on rocks, painstakingly portaged the worst of the falls, and heartily paddled their way through becalmed waters.

According to Andy Drollinger, squadron adviser, the trip started easily enough at Robinson's Bridge, 11 miles west of Grant's Pass. The first afternoon, feeling their way, the novice crews covered four miles of river laced with six rapids.

The second day, profiting from experience, the "rats" easily conquered 20 rapids of growing intensity and became more skilled in reading the "language" of the water that could make a difference between a hole in the bottom of the boat and safe passage, Drollinger said.

"Graves Falls was the first of the five quick drops that we could run," Drollinger said. "The river disappeared completely as it dropped over the falls. The first two boats managed nicely, rolling off the heavy water pads on the right bank rocks.

"The third boat managed the rough part fine, but then jammed on a heavy rock and dropped the cook in the drink."

However, the closest call came later.

Boat three lodged in a narrow shoot between two big rocks. The crew managed to save the gear in the front compartment from going overboard. Crews from the other boats quickly ran lines to her stern, easing the boat out of the hole and into the correct channel.

Boats were repaired as the trip progressed. Roughly 1,200 lbs of men, supplies and equipment were in each of the Navy-surplus LCPRs (Landing Craft Personnel —Rubber).

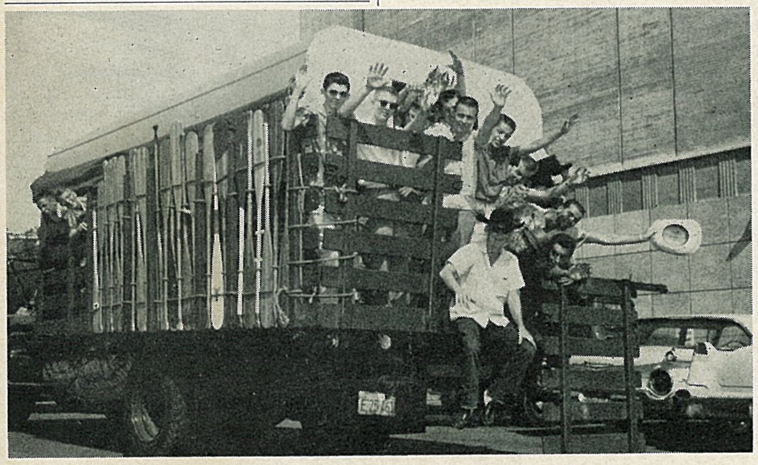
In addition to Drollinger, advisers on the trip included Taru Shimizu (Dept. 500 Astro); Tommy Charles, six-year squadron member; and Dean Rothacher, a student at San Diego State College.

The trip ended at Gold Beach in Oregon. Drollinger summed up: "Eight days on the Rogue is work. But each day for the boys was worth a month of progress toward manhood."

L. W. Miller, Former Vice President, Dies

Brig. Gen. L. W. Miller, USAF (ret.), former vice president of finance for Convair, died last week (Sept. 7) at Naval Hospital in San Diego.

Miller joined Convair in January, 1948, and was named vice president in May of that year. After five and a half years with the company, he resigned in the fall of 1953.



BON VOYAGE—Enthusiastic members of Air Explorer Squadron 340 wave farewells from truck as they leave Bldg. 19 parking lot at SD en route to jump-off spot on Oregon's Rogue River.

'Silver King' Koenig, Big League Ace Of 80s, Victor in 11 Games in 11 Days

Newspaper clippings yellow with age, detailing the fabulous career of one of baseball's all-time greats, are treasured by a Convair Palmdale employee, Ethel Briggs (Dept. 324-2).

The news stories all concern Charles F. Koenig, better known in the sports world of the 1880s and 90s as the "Silver King," the pitcher who set an all-time record by pitching 11 games in 11 days and winning them all! In a single game, he struck out 19 batsmen.

The clippings are yellow because they date back to the 1880s and Ethel particularly treasures them because she is his daughter.

Although Koenig hung up his uniform for the last time in 1897, he is still remembered among older baseball fans because of his outstanding record in the big leagues. He participated in 333 big league games, striking out 1128. He walked 830.

And this record was attained back in the days when pitchers played under conditions far different than those of today. Most clubs had no more than three pitchers and some had only one, with no relief provided. The pitcher's box was 10 feet closer to the plate than it is today and the rules varied considerably from season to season. At one time the batter was allowed four strikes and seven balls and later the rules provided for four strikes and five balls!

Koenig, a big barrel-chested man with a hand large enough to surround a baseball and completely hide it from view, started his baseball career at the age of 18 in 1885 when he pitched for the semi-pro team of Jacksonville, Ill. The following year he joined St. Joseph in the Western League. Later he went on to Kansas City in the National League and St. Louis Browns in the American Association. It was with the Browns that he leaped to fame and was christened the "Silver King" by sportswriters. His surname of Koenig means "King" in German, and his thatch of blond hair resembled burnished silver.

He was truly the king of the hurlers, winning 44 out of 65 games he hurled in 1888, and the following year winning 30 and losing 15.

In 1890 he left the Browns for the Chicago White Sox where he continued to dazzle with 30 wins and 18 losses. The following three years saw his career ebb somewhat as he played with the New York Giants, Pittsburgh and Cincinnati, then mediocre teams which the big pitcher was unable to carry alone.

Disgusted, he quit the game but returned two years later in 1896, signing with the Washington Senators. In 1897 he retired for good and went into the contracting business in St. Louis, where he died in 1938 at the age of 72.

Although Koenig was one of the greatest of the great, he didn't get rich at the game. As a star pitcher in the late 1800's his top salary was $5,000 for an entire season.

In addition to news clippings, Ethel also has in her possession contracts her father signed with the Pittsburgh Athletic Club in 1891 and the New York Baseball Club in 1892.



GREAT HURLER ON GREAT TEAM

Here are two pictures of "Silver" King, a St. Louisan who was a member of the pennant-winning Browns of 1887. King, in the above photo, is shown as he appears today, while at left he is portrayed as he looked in his heyday back in the '80s and '90s.

FADING CLIPPINGS—Ethel Briggs, daughter of old-time baseball great, shows fading news clippings to C. A. Stewart and Jerry Hagoort, all of Dept. 324 at Palmdale facility in California.



CL-44's First Flight Slated in November

MONTREAL — Pre-flight stage has been reached by the first Canadair CL-44 turboprop transport. Checking of the fully installed electrical system and electronics equipment is nearly finished. The hydraulic system is almost complete and is being checked progressively. Flight controls are already function-tested.

All four Rolls-Royce Tyne turboprop engines have been mounted for some time now and installation of a propeller has been made. Instrumentation is now proceeding for engine runs which are scheduled for early October. First flight of the CL-44 is due early in November.

Boy of 11 Blankets Field to Win West Coast Highland Dance Title

An 11-year-old Convair SD son last month became the first youth ever to win the Pacific Coast championship at the annual Highland Games in Burbank, Calif.

Bruce Robinson, son of C. B. Robinson (Dept. 192) and Mrs. Robinson (Dept. 288-8), was judged the outstanding performer among some 70 dancers in different age groups competing in the international competition.

He won no less than 10 first-place plaques, medals and trophies.

In his own class (for 12-year-olds and under), Bruce won four first-place plaques and the class trophy. He followed that accomplishment by winning the best male dancer trophy for performers under 16, then was awarded the Seann Triubhas trophy, and was also judged best performer up to 16 years in the three Highland dances—fling, swords, and Seann Triubhas.

In addition he took the Grand Aggregate trophy, and climaxed the day by winning the Edinburgh medal, signifying the Pacific Coast championship.

Other Convair SD and Astro youths also won honors at the games. They included Margaret Doig, daughter of John Doig (SD); Irene Young, daughter of Bob Young (SD); Barbara McCabe, daughter of Charles McCabe (Astro); and Philip and Michael Robinson who played with the Cameron Pipe Band.



HOT FEET — Bruce Robinson, a Convair SD son, recently became first youngster to ever win Pacific Coast championship at Highland Games. Here he displays winning form in Scottish sword dance.

Score of Convair Men Named On Panels For SAE Mfg. Forum

Twenty-six Convair men representing San Diego, Astronautics, Fort Worth and Pomona Divisions, will play leading roles at the Society of Automotive Engineers meeting and manufacturing forum Oct. 5-9 at the Ambassador Hotel in Los Angeles.

Some of the Convair men have taken part in planning the conference, others will be active participants at meetings.

Leading the Convair groups will be San Diego Division with 16 representatives. They are A. W. Morgan, general chairman of the forum; J. H. Famme, planning committee for aeronautic meeting; F. H. Sharp, also planning committee for aeronautic meeting; Lewis Grant, control of change cost; T. F. McAleer III, control of manufacturing costs; F. E. Sladek, optics in production; F. H. McLaughlin, achievement of product reliability; H. C. Sullivan, high temperature coatings; D. L. Walker, material and processing controls of modern alloys.

Also D. B. Acker, H. A. Smith, and H. A. Sichler, all on facilities planning and maintenance of new equipment panel; R. H. Gilliland, communication between vendor and prime contractor; F. D. Applegate, chairman, missile and drone systems reliability; Glen Karel and J. C. McCafferty, aircraft systems.

Six from Astro will participate: W. L. Young, executive committee of forum; J. E. Trader, handling of propellants and gases in airplane missile manufacturing; L. F. Muller, missile support equipment; J. C. King, materials handling; H. J. Sumner, missile rocket case and pressure vessel manufacturing; and Don Crayton, co-chairman, optics in production.

The Fort Worth contingent includes D. H. Painter, communication between vendor and prime contractor; J. J. Tierney, aircraft systems; and C. D. Little, fatigue of aircraft structures. From Convair Pomona is R. C. Loomis who is on the executive committee of the forum.



PRETTY ACHIEVER — Pert Nancy Kirby, Convair Fort Worth Junior Achiever, was second in Miss Junior Achievement of America competition at recent national conference. Here she goes over souvenirs with Tom Malloy, left, and Gordon Nelson.

Valley Legion Post Elects Convair Men

Members of Palmdale American Legion Post 406 elected two Convair men to top posts.

Walter Chartier (Palmdale Dept. 324-2) was named commander, and Richard Woodbury (Edwards Dept. 303) was elected second vice commander.

Kids Play 'Aerial' Cops-Robbers With Decommissioned YF-102

A Convair YF-102 jet interceptor is the newest and most exciting plaything for children who live in Boron, the desert community near Edwards Air Force Base and the Missile Static Test Site.

The silver jet, used at Edwards for the past few years for testing by NASA High Speed Station, was presented by the Air Force to Boron American Legion Post and is now installed on the Post grounds for the children's enjoyment.

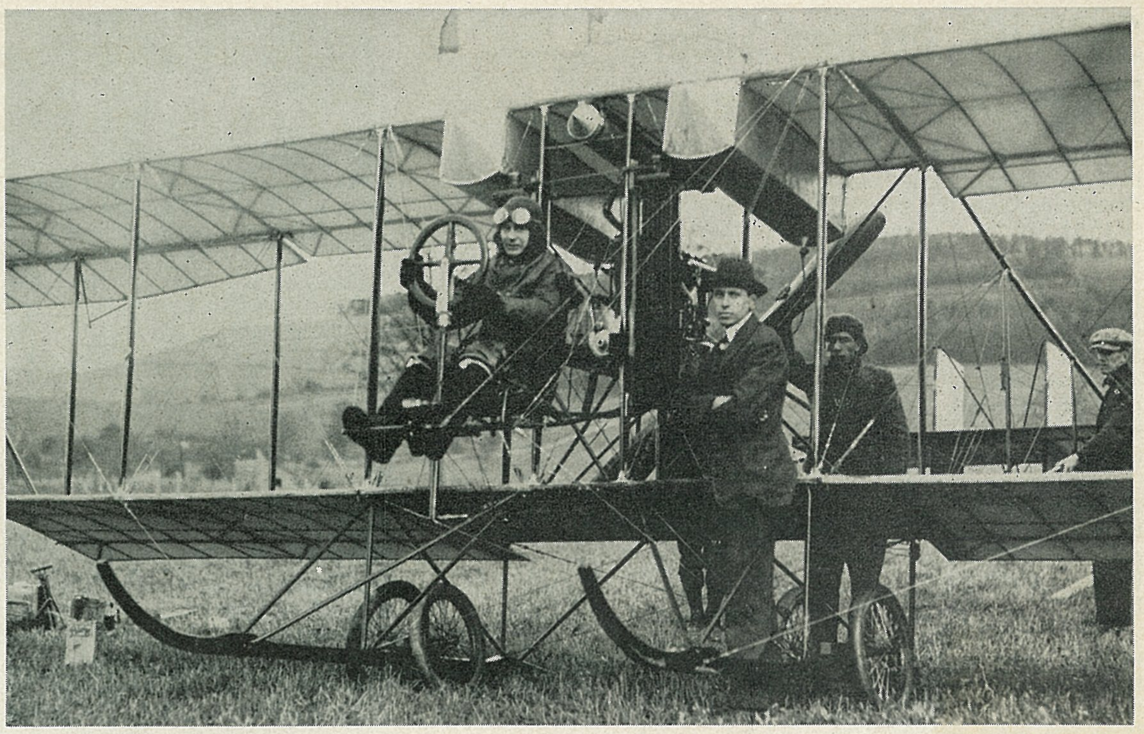
Before being turned over for playground use, Reclamation Section of the 6515th Field Maintenance Squadron removed all useable parts and components. The plane was then assigned to Aero Repair Section to be made safe for children to play on.

Under direction of section chief Lt. Gerald Devillers, M/Sgt. John Cachot and S/Sgt. Rhew H. Bennett, all sharp edges were removed, intake and exhaust ducts sealed, special seat and mock instrument panel installed, and a special control stick put in the cockpit.

In expressing appreciation to the Air Force, Edwin L. Thompson, assistant adjutant for the Boron Legion Post, stated, "There is real excitement among the kids over this airplane. One of these days perhaps some of these boys will fly for Uncle Sam."



CLIMBING KIDS—Children of Boron, Calif., should be envy of kids everywhere. They have real YF-102 as plaything.



PUSHER—This was model TA of 1912 with William T. Thomas standing at right of pilot. Plane was refinement of original hand-built Thomas which first flew in 1910. Ships of this type were highly successful in "golden age" of barnstorming at county fairs.

Thomas-Morse Aircraft, Pioneering Air Firm, Purchased by Consolidated

(For next few installments of this continuing history of Convair, spotlight shifts from Consolidated Aircraft to Thomas-Morse Aircraft, pioneer air firm which dated back to 1910.)

In the summer of 1929 Consolidated purchased the Thomas-Morse Aircraft Corp. and moved it from Ithaca to Buffalo, N. Y. as a wholly owned subsidiary. This became Unit 4 of the North Elmwood Avenue plant. B. Douglas Thomas, designer of some of the most celebrated aircraft of the World War I era and vice president of Thomas-Morse at Ithaca, became president and chief engineer of the subsidiary.

Oddly, the Thomas who came from Ithaca was no relation to the Thomas whose name appeared in the title of the firm—William T. Thomas. Both were from England and both entered American aviation a few years apart as employees of Glenn H. Curtiss at Hammondsport, N. Y.

The first to emigrate was W. T. Thomas, who came to America in 1909 following graduation from Central Technical College, South Kensington. Then 22, he was a motorcycle enthusiast and had worked on gas engines during a pre-college apprenticeship with the British Westinghouse Manufacturing Co. It was natural he should seek employment at Hammondsport, where Curtiss—holder of the world's motorcycle speed record and builder of famous racing engines — had his plant.

Thomas got a job in the drafting room of the Herring-Curtiss Co., and soon found his interests diverted to airplanes. Curtiss had made his first flight in a plane of his own construction (the White Wing) the previous year. Thomas made drawings for the Curtiss Model K aircraft engine (four cylinders, 40 hp) and for the Red Devil biplane used by Capt. Thomas A. Baldwin on exhibition flights.

Deciding in the fall of 1909 to design and build a plane of his own, Thomas obtained use of a Roulette Wine Co. barn and began work in November, assisted by Bert Chambers, a Herring-Curtiss motorcycle mechanic. Thomas did business as the Thomas Brothers Co., although his brother Oliver did not arrive until several months later. (Oliver returned to England in 1913, and after World War I managed family cattle interests in Argentina, where he died in 1947.)

The first aircraft, hand-built by Thomas and Chambers, evolved as a pusher biplane with horizontal control surfaces mounted on a framework ahead of the wings. It spanned 27 feet and was powered by a 22-hp Kirkham auto engine. Chambers flew it first in the spring of 1910 at Hornell, N. Y. where the shop was moved to be near a suitable landing field on the Page farm. Thomas made his own first flights in June.

Late in 1910 the company moved to Bath, N. Y. and soon had eight or ten employees. This was the "golden age" of exhibition flying. The fledgling aviation industry catered not to government or airline but to crowds at county fairs. The first Thomas plane was widely exhibited by Walter E. Johnson and toured the South in 1911. The new Model TA of 1911 was especially successful, winning a series of races capped by the 25-mile, $1,000 prize event at the Syracuse State Fair of 1912.

Next to barnstorming, the best source of revenue was teaching, and the Thomas School of Aviation, Inc. was opened in 1912, the first to be chartered by New York State. An early graduate, Frank H. Burnside, flew the Thomas Model E to 13,000 feet in 1913, claiming a new U. S. altitude record.

In 1912 the company was incorporated as the Thomas Brothers Aeroplane Co., with William as president, Oliver as vice president, and Cummings M. Cox, secretary. Work continued on new pusher designs. A tractor was tried with dubious success, and several wood-hulled flying boats were built and flown from Lake Salubria.

Vultee Field 'Club' Will Hold Annual Get-Together Oct. 3

Some 50 men and women from Convair Astronautics and San Diego Divisions are expected to make a nostalgic trek Oct. 3 to the Royal Hawaiian Hotel in Anaheim.

Occasion is the 12th annual reunion of former members of the Vultee Field Division of Consolidated Aircraft. San Diego elements are expected to make the trip by chartered bus.

A unique group, this "club" has no officers, no dues, no charter or any visible means of holding them together.

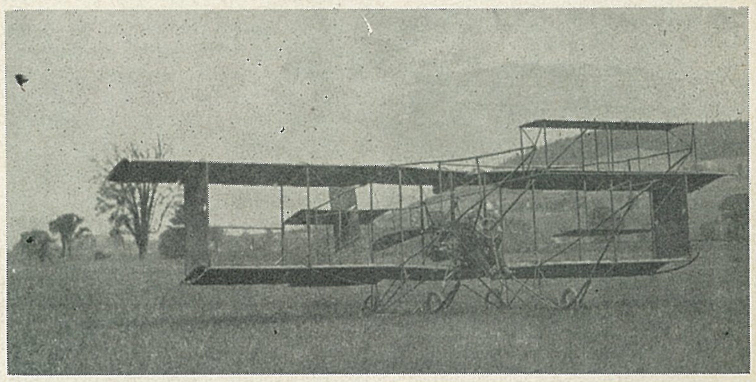
Their get-togethers, held once each year since 1946 when Vultee Field was disbanded, are merely social. Cocktails and dinner are followed by general conversation.

Of an estimated 7,000 employees at Vultee Field at its peak employment, the group currently has about 450 members.

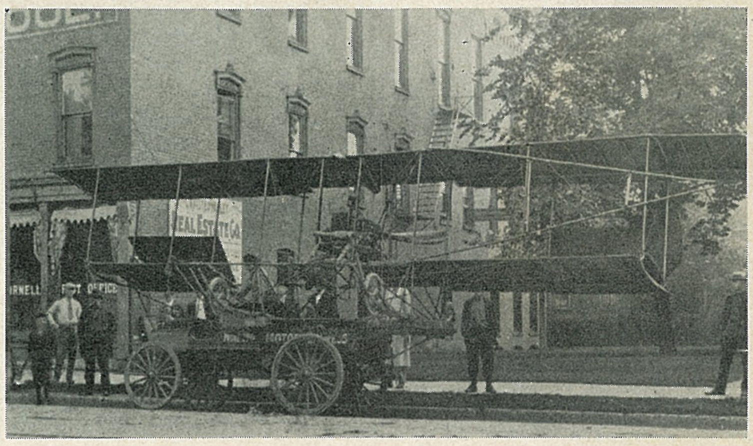
If any Convair employee in the San Diego area is interested in taking part in these festivities, P. A. Nagy, ext. 1326, at San Diego Division, will supply details.

CONVAIR PEOPLE GAIN EXTRA HOUR SEPT. 27

All Convair people in California are reminded to turn their clocks back one hour on Sunday (Sept. 27) when the state reverts to standard time. Daylight saving time has been in effect since last April.



ORIGINAL — At top is original Thomas plane, pictured at Hornell, N.Y., in summer of 1910. Following year plane was widely exhibited by Walter E. Johnson and toured Southern states.



Sixth IRC Archery Shoot To be Hosted by Convair

Archers from Convair SD will host the sixth annual Industrial Recreation Council Archery Shoot Oct. 11 at the Convair Kearny Mesa range.

As in the past, CRA will foot the entry tab for anyone at Convair SD who registers before the Sept. 25 deadline. After that date participants will have to pay not only their own entry fee but an additional 50¢ penalty fee.

Entry blanks will be available at employee services locations, both plants, and from Bud Bence, club president, AC-2-5765, or Al Phipps, tournament coordinator, CY-5-8194.

The shoot will be a field event with 28 targets in the morning and a team event in the afternoon. Team members must be from the same organization. In team competition 98 arrows will be shot at 60 yds. at 48-in. targets.

The shoot is open to adults, both men and women, juniors and children. Phipps said trophies will be awarded first place winners in all classes in addition to trophies to each member of the winning team.

Scoring will be conducted under a percentage classification system which gives the novice as well as the expert a chance at winning. Refreshments will be available at the range.

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Next Archery Club event for members is an afternoon shoot at 3:30 p.m., Sept. 23 at the Kearny Mesa range.

Phipps said reservations should be made before Sept. 23. The shoot will be followed by a picnic and hot dog roast. The event will be funded out of the club treasury.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Sept. 1 through Sept. 15:

Thirty-year: Dept. 123, W. F. Seely.

Twenty-year: Dept. 6, H. W. Callihan, D. G. Clark; Dept. 115, V. J. Rocco; Dept. 401, Thaine Allison; Dept. 403, H. B. Hansen; Dept. 603-2, W. E. Nuckles.

Fifteen-year: Dept. 3-1, T. G. Champlin; Dept. 14-9, R. R. Hammack; Dept. 31, B. N. Waite; Dept. 201, Marceau Coven; Dept. 231, H. A. Ball Jr.; Dept. 233, A. I. Harger; Dept. 407, J. F. Macdonald; Dept. 600-1, D. W. Swanson.

Ten-year: Dept. 1-11, J. V. Naish; Dept. 6-70, Cora B. Smith, Albert Wittenberg; Dept. 15, R. G. Clayton, K. E. Vaughn; Dept. 25-9, C. W. McGary; Dept. 31, E. C. Schmidt.

Dept. 110, H. B. Palmer; Dept. 115, E. W. Carter; Dept. 117, Velva S. Davis; Dept. 136, Nola S. Gower; Dept. 138, F. H. Givens; Dept. 201, Viola H. Cole, Margaret W. Smith; Dept. 216, Mattie S. Ausk.

Dept. 231, F. C. Lawrence; Dept. 267, W. L. Alexander; Dept. 280, William Hungerford; Dept. 400-1, T. H. Fletcher; Dept. 402-1, F. T. Mason; Dept. 600-1, P. P. Clement Jr., G. R. Farrington; Dept. 603-6, N. B. Coffinbarger.

Promotions

Promotions to or within supervision effective Aug. 31:

Dept. 6, Engineering: (6-35) To sr. aero group engineer-advanced projects, E. W. Boteler. To sr. thermo group engineer-environments, F. A. Stephenson. To sr. aero group engineer-research, H. Yoshihara. To aero group engineer, W. D. Reeder, A. D. Riedler. (6-53) To project engineer, J. E. Hughes. (6-70) To asst. foreman, S. R. Merryfield.

Dept. 31, Experimental: To asst. foreman, R. E. Bowman, O. W. Brotherton, W. E. Heathman, W. E. Porter.

Dept. 69, High Speed Wind Tunnel: To wind tunnel group engineer, D. P. Cumming.

Dept. 101, Sheet Metal: To asst. foreman, E. T. Gregory.

Dept. 115, Machine Shop: To asst. foreman, W. Sileneck.

Retirements

SAN DIEGO

BROWN—Isaac G., Dept. 21-1. Seniority date Dec. 10, 1952, retirement effective Aug. 31, 1959.

HUNT—Theodore, Dept. 403. Seniority date Jan. 31, 1949, retirement effective Aug. 31, 1959.

JOHNSTON—Robert, Dept. 204. Seniority date Nov. 21, 1950, retirement effective Aug. 21, 1959.

KELLY—Muriel G., Dept. 101. Seniority date Jan. 21, 1951, retirement effective Aug. 27, 1959.

MINANDO—Frank, Dept. 206. Seniority date Sept. 19, 1955, retirement effective May 6, 1958.

SHAULIS—Eugene L., Dept. 14. Seniority date April 6, 1942, retirement effective Sept. 4, 1959.

STEED—John F., Dept. 218. Seniority date June 15, 1953, retirement effective Sept. 4, 1959.

Personals

SAN DIEGO

To all our Convair friends: We wish to thank you for the beautiful flowers and other expressions of sympathy when we lost our mother and grandmother.

Mr. and Mrs. Clifford Jorgensen and girls (Dept. 231)

* * *

Our deep gratitude to Dept. 21 and 25 personnel, and all other Convair friends, for the many gestures of sympathy during our recent bereavement.

R. F. Missman and family (Dept. 25)

* * *

We wish to express our thanks to Dept. 400 friends, as well as other Convair employees, for the beautiful flowers and expressions of sympathy sent in memory of Edward A. Rimmer.

Mrs. E. Rimmer
William H. Rimmer
Harold E. Rimmer

Births

PORTER—Son, Jeffrey Lyn, 8 lbs., born Aug. 25 to Mr. and Mrs. James Porter, Dept. 6.

Deaths

LEAK—Leslie N., Dept. 3-1. Died Sept. 9. Survived by wife, Elizabeth; two sons, Patrick and Norman; daughter, Mrs. Nancy Castla; two sisters; two grandchildren.

Choralaires Invite More New Members

Convair SD's Choralaires are looking forward to their most successful season as they launch their regular Monday evening schedule of rehearsals in the CRA Clubhouse on Pacific Hwy.

"Early response, especially on the part of newcomers, has been excellent so far," Bill Vogel, director of the choral group, said last week.

"However, we are leaving a standing invitation open for the rest of the month in order to encourage even more newcomers to attend," Vogel added. "We are hoping that we will be able to assemble the largest group in our seven-year history."

Rehearsals are held every Monday at 7:30 p.m. All Convair SD folk and family members interested in singing are invited to attend. No prior experience is necessary. Couples, as well as single people, are invited to join.

Some 20 concerts and singing appearances are on tap for the new season, starting already in late October and early November.

More information can be obtained by contacting Vogel, ext. 687, Plant 1, or Martha Woodberry, CRA commissioner, ext. 1245, Plant 1.

28 Years in Convair Rates Party Cake

An Astronautics couple assigned to Vandenberg AFB recently observed a milestone, marking a combined total of 28 years between the two as Convair employees.

Occasion was presentation of a Convair 20-year pin to J. D. Frisby, Astro foreman. A cake was shared with other employees in the operations support section.



ANNIVERSARY—Vince Cernuto, SD manufacturing control chief, wears 25-year service emblem which he received late last month.





DERBY DAY—Over 125 underprivileged children were hosted by 50 Convair SD and Astro boat owners Aug. 29 at Junior Fishing Derby. Each child received prize, ranging from fishing poles to silver dollars. Photos were snapped by Bill Evans (Dept. 25).

Over 800 SD Bowlers to Roll At Six Different Keg Alleys

Over 800 keglers at Convair SD have entered winter leagues sponsored by the CRA, Mike Brooks and Jim Hayman, co-commissioners of bowling, report.

Openings still exist in some leagues, while others are filled to capacity. However, all leagues will continue to take names as fill-ins in the event some of the bowlers get transferred or are forced to drop out of the league.

Following is complete list (with persons in charge) of Convair SD keg leagues:

CLAIREMONT BOWL

Monday: Mixed handicap league, 6:30 p.m. (12 teams); Dick Hanson, ext. 1437, Plant 1.

Friday: Mixed handicap league, 6:30 p.m. (12 teams); Ralph Campbell, AC-2-6351.

VICTORY LANES

Thursday: Mixed foursome league, 6:30 p.m. (12 teams); Joe Rudis, ext. 2371.

TOWER BOWL

Friday: 800 scratch league, 6:30 p.m. (eight teams); Mike Brooks, ext. 583, Plant 2.

Friday: 850 scratch league, 6:30 p.m. (eight teams); Mike Brooks, ext. 583, Plant 2.

Friday: Women's handicap league, 6:30 p.m. (still forming); Mike Brooks, ext. 583, Plant 2.

BOWLERO: MISSION VALLEY

Monday: Mixed handicap league, 6:30 p.m. (eight teams); June Davis, ext. 2351, Plant 1.

Tuesday: Mixed handicap league, 6:30 p.m. (eight teams); Bob Heath, ext. 1203, Plant 1.

Tuesday: Engineering handicap league, 6:30 p.m. (16 teams); Bob Johnston, ext. 2381, Plant 1.

Friday: Mixed handicap league, 9 p.m. (10 teams); Jim Hayman, ext. 1155, Plant 1.

BOWLERO: LEMON GROVE

Monday: 825 scratch league, 6:30 p.m. (10 teams); Mike Brooks, ext. 583, Plant 2.

Monday: Mixed handicap 6:30 p. m. (eight teams); Jim Hayman, ext. 1155, Plant 1.

PACIFIC RECREATION

Tuesday: Trio league, 4:30 p.m. (eight teams); George Burham, ext. 2742, Plant 1.

Wednesday: Mixed handicap league, 6:30 p.m. (eight teams); Jim Hayman, ext. 1155, Plant 1.

Wednesday: Mixed scratch league, 6:30 p.m. (eight teams); Jim Hayman, ext. 1155, Plant 1.

Thursday: Mixed handicap league, 6:30 p.m. (16 teams); Jim Hayman, ext. 1155, Plant 1.

PACIFIC RECREATION (Swing Shift)

Tuesday: Mixed handicap league, 11 a.m., (16 teams); Mike Brooks, ext. 583, Plant 2.

Wednesday: trio league, 1:30 a. m. (12 teams); Mike Brooks, ext. 583, Plant 2.

Saturday: Mixed handicap league, 1:30 a.m. (12 teams); Mike Brooks, ext. 583, Plant 2.

(Three Convair SD teams are entered in the Industrial League which rolls Thursdays at 11 a.m. at Pacific Recreation.)

Convair Musician Will Teach Piano

Enrique A. Rivera, a Dept. 600 employee at Convair SD Plant 2, will conduct piano classes for adults in the evening program of three adult education schools. Tuesday evenings he will teach at Northwest Adult High School, Pacific Beach; Wednesdays, Harvey Lewis Jr. High School, Allied Gardens; and Thursdays, Hoover Evening High School, San Diego. Registration may be made at the individual school.

SD Dept. 6 Men Sweep Toastmaster Vote

Irving Van Horn tops the new slate of officers—all Convair SD Dept. 6 men—chosen by Convair Toastmasters Club No. 457.

Other officers are educational vice president, Brown Herreshoff; administrative vice president, Andy Gormish; secretary, Til Schafer; treasurer, Chuck Wilits; sergeant-at-arms, Earl Erickson.

Retiring as president of the group was Harry Morgan.

G. D. Christensen (Dept. 1-71) will install the newly-elected officers at 7 p.m. installation ceremonies Oct. 5 in the Astronautics executive dining room.

Square Dance Classes Start For Beginners

Convair SD's Hoedowners guarantee everyone a fall and winter full of fun if they take advantage of a beginners class that starts Oct. 5.

Novices are accepted for membership in the square dance organization only twice a year, once in the spring and once in the fall. Membership will remain open for a three-week period after Oct. 5, then close until next year.

P. E. Liggett, CRA commissioner, said the beginners classes, which last roughly three months, will be held Monday evenings at 8 p.m. at the American Legion Hall, 4061 Fairmount Ave.

All ages can join, and novices are welcomed in singles, couples or squares. Instruction ranges from simple walk-throughs at the start to intricate steps as the dancers move into more advanced groups.

Registration can be made by contacting ext. 1245, Plant 1; Liggett, HO-3-6098 (after 4 p.m.); or Charles Wheary, AT-1-0274.

Next scheduled event for members is a "Back to School Dance" Sept. 26 at the University Heights Community Center, 4044 Idaho St. Sharing the mike with Van Vander Walker at the 8 p.m. dance will be Bob Finley.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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AEROMODELERS — Contest for ½A, A and B gas free flight Sept. 27, 8:30 a.m., Clairemont Mesa field. Contact Walt Mooney, ext. 626 or 1362, Plant 1.

ARCHERY — Entries now open for IRC shoot Oct. 11. Afternoon shoot and picnic Sept. 23, 3:30, Kearny Mesa range.

BALLROOM DANCING—New series of classes start week of Sept. 21-25 at Grace McGrath Studio, 1322 Fifth St.

BASEBALL—First tryouts for team Sept. 20 and 27 at 10 a.m., University Heights playground.

BRIDGE CLUB—Master point play Sept. 21. Next session Sept. 29. Both start 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CHORALAIRES — Rehearsals every Monday evening at 7:30, CRA Clubhouse on Pacific Hwy.

FISHING CLUB — Volunteer help needed to finish boat builders facility at Gillespie Field. Contact Dale Cromartie, ext. 1650, Plant 1.

GUN CLUB — Hunters can sight in rifles free this Saturday (Sept. 19), noon to 4 p.m., Valley Gun Club, adjacent to Gillespie Field.

ICE SKATING—Convair night every Thursday. Discount rates between 6:30 and 8 p.m. at Iceland, 6055 Lake Murray Blvd.

JEEP CLUB — Annual cavalcade leaves Desert Center Oct. 3, at 7 a.m.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admission: adults 25¢; children, 15¢.

RADIO CLUB — Meeting tomorrow (Sept. 17) at 7:30 p.m. in Harbor Drive headquarters.

ROLLER SKATING — Skate night Monday (Sept. 21) at Skateland, Front and G Sts., at 9 p.m. Free tickets at employee services, both plants, and from departmental representatives.

SPORTS CAR CLUB—Meeting tonight (Sept. 16), 7:30 p.m., Natural History Museum, Balboa Park.

SQUARE DANCING — "Back to School Dance" at party night Sept. 26, 8 p.m., American Legion Hall, 4061 Fairmount Ave. Beginners class starts Oct. 5, 8 p.m., University Heights Community Center, 4044 Idaho St.

WOMEN'S ACTIVITIES — Charm school registration closes Sept. 18 at employee services, both plants.







SHOOT 'EM UP—CRA Gun Club hosted two Fiesta events weekend of Aug. 29-30. On Saturday, Remington gun handler Tom Frye (center) put on shooting exhibition. Surprise guest at shoot on Sunday was Maj. Reuben Fleet, founder of Consolidated Aircraft. In photo at left, Fleet (center) talks with Jack Swank, commissioner, and Art Carey. At right are winners of ATA trap shoot (from left): Ezra Johnson, Jack Swank, George Clayton, Sona Wong, Ralph Samaha, Billy Lambert, George Skurla, Claudia Johnson, Jack Berg, and W. Y. Gatterman. Over 165 entered the American Trapshooting Assoc. event.



FULL HOUSE—Crowd estimated between 750 and 1,000 ringed shooting area at Gillespie Field to see Remington gun handler Tom Frye put on exhibition. New CRA Clubhouse is in background. Attendance was near record for Gillespie.

Convair Daughter Wins Tennis Title

Sixteen-year-old Kathy Chabot (Dept. 6), teamed with Karen Hantze of San Diego, to win the U. S. Girls' Lawn Tennis Doubles Championship Aug. 30 at the Philadelphia Cricket Club.

The Convair daughter and her partner defeated Billie Jean Moffitt of Long Beach and Barbara Browning of Burbank in a close match, 6-4, 4-6, and 11-9.

First Baseball Tryout Slated

CRA-sponsored baseball will jump back into active status Sept. 20 when the first tryout for Convair SD's hardball team is held at 10 a.m. at the University Heights playground.

Pete Beyrer of the CRA office said CRA expects to enter a team in the American League, the top San Diego baseball loop.

"What we particularly need," Beyrer said, "are players with some pro experience. We are allowed a maximum of five professionals on the team. Naturally, other top caliber ball players are also invited to try out."

After the initial Sept. 20 practice, another session will be held the following Sunday (Sept. 27). New team candidates can attend either one or both of the tryouts.

Beyrer said that two or three practice games will be scheduled before the league opener, sometime in mid-October.

Classes Offered Riding Clubbers

Three programs are being offered Convair SD Riding Club members at discount prices at the Kenmore Stables in Mission Valley, Marc Beresford, commissioner, reports.

Included are riding lessons for children which can be arranged for any day except Saturday. A Thursday 7:30 p.m. riding class for adults and a Wednesday morning class at 10:45, especially convenient for swing-shifters and the ladies, are scheduled.

The Convair SD Riding Club membership card is all that is required to obtain the discount for any of the classes. Reservations can be placed by calling the stables, CY-5-5352.

New Memory Course Starts Next Week

A new series of memory classes will start next Tuesday (Sept. 22) for Convair SD people at the House of Hospitality, Balboa Park.

Thereafter, two-and-a-half hour classes will be held each Tuesday starting at 7 p.m. for an eight-week period. Cost of course for each person is $10.

To confirm reservations payment of fee should be made before start of course at employee services, Plants 1 and 2. For additional information contact ext. 1245, Plant 1, or ext. 656, Plant 2.

CRA Sports & Recreation Convairiety

Seven Ballroom Dance Classes Start Next Week for SD Folk

Convair SD employees and family members with an itch to get those dancing feet "educated" will be able to do so at special CRA-discount rates.

A full schedule of instruction, ranging from beginner lessons to Latin American variations, will start next week (Sept. 21-25) at the Grace McGrath Dance Studio, 1322 Fifth St.

On Monday at 7:30 p.m. beginners and others who wish to "brush up" will be able to attend a class devoted to the typical American dances. Fundamentals are stressed in the first lessons, from there progressing to the more advanced steps. The same class is also offered Wednesdays at 7:30 p.m.

Teen-agers are invited to attend a special "swing and smooth" class that will be held on Tuesdays at 7:30 p.m. Included during the class is tutoring on proper dance etiquette. Also meeting on Tuesdays, at 8:30 p.m., will be a course on Latin dances for beginners.

Two classes will also be offered Thursdays: social dances for an advanced group at 7:30; and an intermediate social dance class at 8:30.

A special Friday night session at 7:30 will be devoted to Latin dances for an advanced group only.

Advance registration is not necessary for any of the classes, but additional information is available by contacting BE-4-8686 evenings and Saturdays.

The lessons are underwritten partially by CRA. Current fee is $3 a month.

Jeep Clubbers Set Cavalcade Oct. 3-4

Members of CRA's Jeep Club and the San Diego Ridgerunners will leave Desert Center on Oct. 3 at 7 a.m. when they stage their annual cavalcade to Walter's Camp, Tom Binder, club spokesman, reported.

After the jeep jaunt across the desert, members will camp out overnight. The next day the club will conduct a shoe race, can race and relay event outside the camp.

Over the Labor Day weekend a group of Jeep Clubbers, led by Art Thomas (Dept. 31), blazed a trail between Desert Center and Walter's Camp in preparation for the annual cavalcade.

SD Sports Clubbers Sweep Aztec Rally

Convair SD Sports Car Club entries in the recent Aztec "Excuse My Dust" rally made a clean sweep of events, winning both the top three driver-navigator positions as well as the team award.

Leading the SD contingent were D. Hall and F. G. Brickson, first place; Dick Bauer and Bob Dunn, second; and Tim Kienholz and George Kendall, third. Barrie Freeman placed fifth in the "seat of pants" class.

Few Openings Left For Charm School

A few openings remain for Convair SD women who would like to enter the new charm school opening the end of September.

Martha Woodberry, CRA commissioner of women's activities, said that registration will close the end of this week (Sept. 18) for the six-week series of classes.

Sessions will start Sept. 30 and will be held each Wednesday from 7-9 p.m. in the House of Hospitality, Balboa Park. Registration fee of $7 per person must be paid at the time of signing.

Applications are being accepted at employee services, both plants; Fordham St., office of Bessie Cooper, ext. 100; Rose Canyon, office of Dorothy Kniffen Reed, ext. 2239, or Virginia Cannon, ext. 2125.

CRA Gun Club Events Attract Large Crowds

A gun handling exhibition by expert Tom Frye on Saturday and a registered ATA trap shoot on Sunday drew record crowds to the CRA Gun Club facility at Gillespie Field the weekend of Aug. 29-30.

Jack Swank, commissioner, estimated combined attendance was near 1,400. "Both events were well received by those attending," Swank added. "Frye lived up to all his advance billing and put on an exceptional performance. The trap shoot was also well attended and drew entries from all over Southern California."

Among competitors in the trap shoot was Maj. Reuben Fleet, founder of Consolidated Aircraft. "Mr. Fleet was favorably impressed with the expansion of the Gun Club facility and commented on the growth of the Gillespie Field CRA location," Swank said.

Over 165 entered the registered American Trapshooting Association shoot. Convair winners included George Clayton, 16-yd. event, Class B; George Skurla, 16-yd. event, Class C; and Billy Lambert, 16-yd. event, Class D.

Jack Berg won high gun handicap honors; winner for the ladies in the same class was Claudia Johnson. The high junior entry was Billy Lambert.

Doubles winners in Class A were Dr. R. N. Lambert and W. U. Gatterman. Two representatives of a Holtville contingent, Sona Wong and Ralph Samaha, also won honors.

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Another service of the Convair SD Gun Club will be offered this Saturday (Sept. 19) when all deer hunters at Convair SD will be able to sight in their rifles free of charge.

Jack Swank, commissioner, said hunters will be able to sight in rifles between noon and 4 p.m. at the Valley Gun Club, adjacent to the Convair Recreation area at Gillespie Field.

There is no charge for the service and instructors will be on hand to assist.

ASTRO TRAVELERS INVITE SD FOLK

A special invitation to San Diego Division employees who own small travel trailers to participate in activities of the Astro Travelers has been extended by Art Wrightson, CRA commissioner.

The Astro Travelers currently number 16 families, including two from San Diego Division, who make monthly campouts, trips, etc.

Next event will be Sept. 26-27 at either San Onofre, Camp Pendleton, or Picnic Lake Park, off Highway 80. Other trips are planned for Oct. 9, 10 and 11 (Borrego Pioneer Days) and Oct. 23, 24 and 25 (Palm Springs Rally).

Regular meetings are held the first Tuesday of each month at 7:30 p.m. in the Astronautics cafeteria. Information is available through Wrightson, ext. 1271, or Jerry Janda, ext. 1210, at Astro.

Convair Night Set For Globe 'Planet'

CRA at Convair SD has bought the house for the Oct. 4 performance of "Visit to a Small Planet" at the Old Globe Theater in Balboa Park.

All tickets will be reduced 75¢. Instead of regular $1.75 and $2.25 prices, the seats will be offered for $1 and $1.50. They go on sale at employee services, both plants, Sept. 17 at 9 a.m.

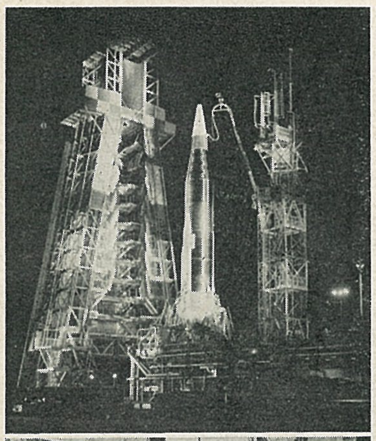
SPANISH CLASSES FILL FAST AT SD

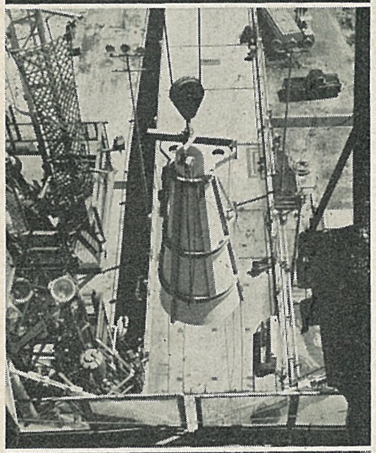
Spanish classes at Convair SD are now being conducted on a weekly schedule with more than 70 students enrolled in the two groups.

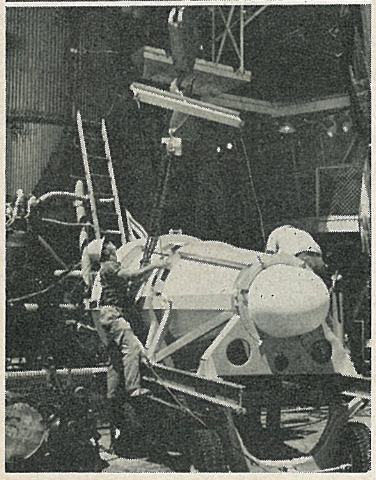
Meeting Tuesdays, between 7 and 9 p.m., in Room 4 of the Balboa Park Conference Bldg. is a beginners class instructed by Jim Hardison (Dept. 15-1).

An advanced group, taught by Mrs. Elba Peralta (wife of Manuel Peralta, Dept. 6) is meeting every Monday during the same hours in Room 2 of the Conference Bldg.

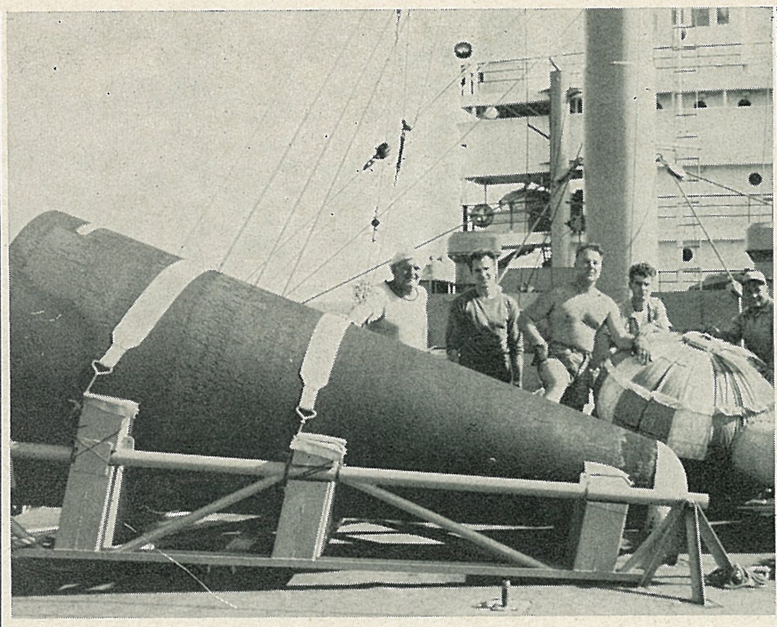
Both classes will run for a 15-week period. Newcomers are welcome to attend. There is no charge for the CRA-sponsored instruction, which is directed toward giving students a "working" knowledge of the Spanish language.

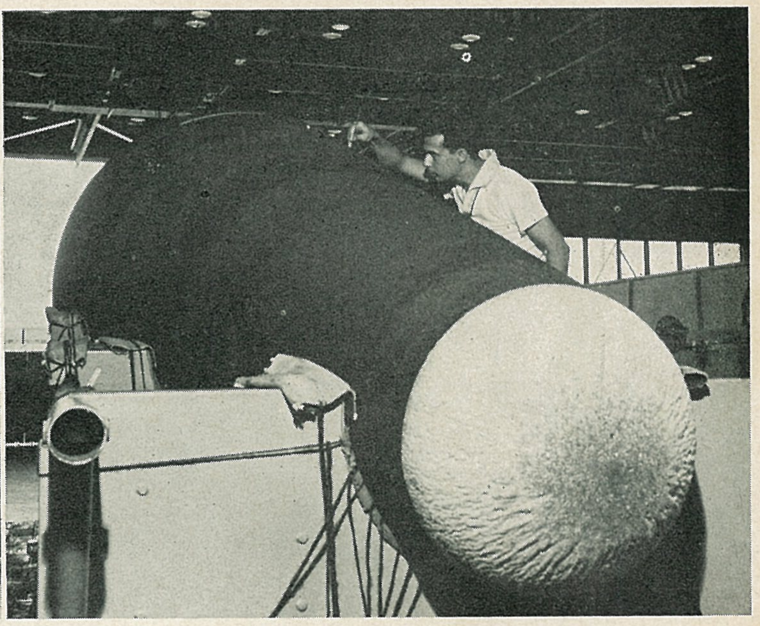






GOING SOMEWHERE — Three photos above show nose cone of Atlas missile that was launched July 21. Cone ultimately was recovered from South Atlantic. Lower pictures show nose cone being lifted to top of tower, while at top is missile ready to go. Gleaming white at first, cone darkened during flight, burned by heat of re-entering atmosphere.





COMING HOME—Shipboard photo, left, shows Atlas missile nose cone shortly after recovery from waters of South Atlantic. Part of balloon which floats on surface and prevents cone from sinking to bottom is at right. In right-hand photo, technician gets up-close examination of cone that soared to 700 miles above earth and returned.

Atlantic 'Outfielders' 'Catch' Cones, Capsules

(Continued from Page 1)
rockets on the cone start firing to steady it in nose-first flight, reducing air friction. As it approaches the impact point, the back plate comes off and from this emerges a special recovery package. Attached by strong steel shrouds, the package trails behind the falling nose cone. A pilot parachute snaps open, followed by a larger chute to slow the cone's speed. Last, a tough rubber balloon pops out and inflates. In the water, the balloon floats on the surface, with the nose cone submerged, hanging from the balloon by the steel shrouds.

Further to assist the "outfielders," a light atop the balloon flashes on at impact, dye and shark repellant are released and radio begins to broadcast a steady beep.

Often recovery ships and aircraft can follow visually the fiery trail as the nose cone makes its plunge. This is one of the reasons most launchings are at night.

On arrival at the impact point, the salvage vessel puts a motor launch over the side and divers secure lines to the nose cone itself (or data capsule) and it is hauled aboard the mother ship.

The first full-scale Atlas nose to be recovered for post-flight analysis was fired from Cape Canaveral at 12:20 a.m. July 21. It was the biggest re-entry vehicle flown in the free world, up to that time. Built by General Electric's Missile and Space Vehicle Division, the vehicle is over 12 feet long with a rounded nose. It is constructed of relatively lightweight "ablation" material that burns slowly under the terrific heat of re-entering the atmosphere.

Vigilante (For Which SD Developing Radar) Completes 100th Flight From Palmdale

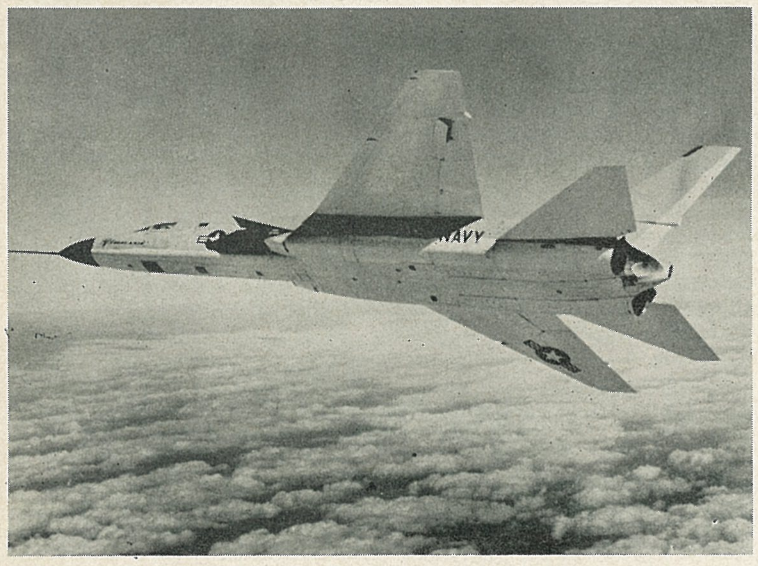
The supersonic A3J Vigilante, newest long-range attack weapon system for the U. S. Navy for which Convair San Diego is developing the radar system, has completed its 100th flight.

The twin-jet all-weather attack aircraft is being built for the Navy by the Columbus, Ohio, Division of North American Aviation, Inc. First flight of the first A3J was on Aug. 31, 1958, at Palmdale where the craft is undergoing extensive flight test.

Convair San Diego Division's electronics sub-department of engineering is working on the research, development, design, and manufacture of radar systems under a $2 million contract received from Autonetics Division of North American. Another $1 million in spares will be furnished by Convair SD.

The automatic bombing-navigation system enables the pilot to pin-point his target. Completion of Convair's current contract is scheduled for next June.

The A3J, which carries a pilot and a bombardier-navigator, is designed for duty aboard aircraft carriers as well as at land bases.



PASSES 100 MARK—Navy's A3J, supersonic all-weather attack aircraft, for which Convair is supplying bomber-navigation system, recently made 100th flight in less than year of testing at Palmdale, Calif., test base. Twin-jet, long-range plane is being built for Navy by North American's Columbus, Ohio, Division. It is designed for duty aboard aircraft carriers as well as from land bases. Convair-developed bombing-navigation system enables pilot to pin-point target.

Air Transport To Be Discussed

Members of three engineering societies in the San Diego area will hear a talk on the "Development of Air Transport" at a dinner meeting tomorrow night (Sept. 17) in the El Cortez Caribbean Room.

William Littlewood, vice president of equipment research for American Airlines, will be the featured speaker at the meeting sponsored jointly by the Institute of Aeronautical Sciences, the Society of Automotive Engineers, and the American Society of Mechanical Engineers.

Maj. Reuben Fleet, founder of Consolidated Aircraft, will introduce the guest speaker after the 7 p.m. dinner.

Littlewood is the national president of the IAS and the ASME lecturer for 1960. During his career at American Airlines he has been associated with the development of the Convair 240 and more recently the 600.

Japanese Check Out In F-102s at George

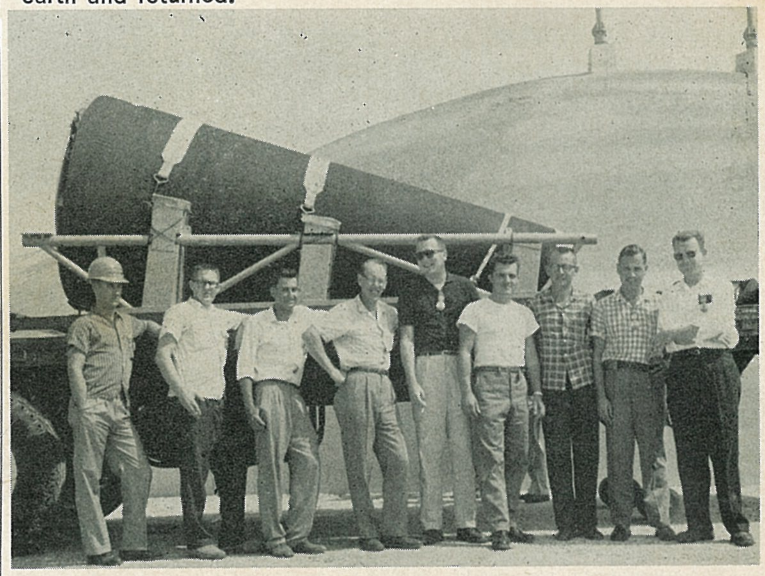
A group of Japanese Air Force officers were checked out in Convair-built F-102As at George AFB, Victorville, California, last month while in this country to evaluate U.S. interceptors for possible use by their own Air Force.

The eight officers, four pilots and four maintenance and electronic specialists, received familiarization at a short ground school conducted by instructor pilots of the 329th FIS. J. A. Hitch, Convair SD field representative, stationed at George AFB, assisted.

'Future Electronics' Subject of Lectures

A series of special lectures featuring some of the top men in the electronics field begins Sept. 22 in San Diego under the direction of the University of California Extension.

Titled "Foundations of Future Electronics," they will be at 7 p.m. each Tuesday at the Dewey School Auditorium, 3521 Rosecrans, San Diego.



ROUND TRIPPER—Astronautics personnel at AFMTC were interested spectators when 8-C nose cone, recovered after ICBM flight, was returned to launch complex area for observation. On hand were Reece Ray, Terry Terhune, Gordon Goldberg, Kelsie Lawrence, Murphy Wardman, Ken Malowitz, John Padgett, Jim Vevera and Lee Hull.

Story of Missile Flight Locked in 'Messenger'

Re-entry (when a ballistic missile plunges back into the atmosphere at 15,000 miles per hour) has been described as a missile's most critical period in ballistic flight.

The method used in gathering information during this period and its subsequent recovery from the ocean impact area is still another story.

Nose cones or warheads reentering the atmosphere at tremendous speeds are surrounded by a layer of heated, ionized air. This layer or sheath of ionization effectively ruins radio transmission from the projectile to ground stations.

Thus, information gleaned during this crucial period must be stored internally in the projectile for recovery later.

For this purpose the Air Force uses a special information recovery device developed by General Electric Corporation. It is known simply as a "messenger" in trade language.

The messenger is an instrumentated plastic sphere approximately 18 inches in diameter. It is made of polyurethane foam with a covering of ablative material (material which burns away at a controlled rate). It is waterproof and light enough to float.

Inside is a miniature magnetic tape recorder which makes a permanent record on tape of all events taking place following separation of the nose cone and prior to breakaway of the sphere from the cone itself. In addition, there are several devices to aid in its recovery. Cans contain dye marker and shark repellant. There is a special switch which operates on contact with salt water to trigger a self-sustained radio transmitter. There is also a "sofar" bomb which sinks into the ocean depths and sends out vibrations that can be picked up by sonar equipment aboard ship.

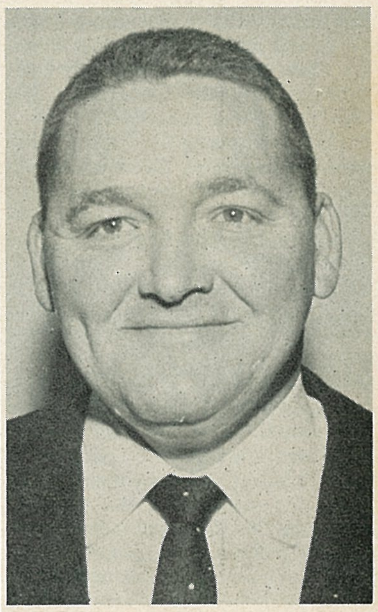
As the nose cone rushes toward impact, the entire sphere is ejected to fall free at a slower rate, but still fast enough to require the protection of its ablative covering. This covering shatters on impact.

Picket ships normally pick up the "sofar" vibrations and get a "fix" on the sphere's location, prior to the time the ship's radio picks up regular signals.

Ships then converge on the point and fish the sphere out of the ocean via nets.

The foam shell of the sphere is so tough it must be pried or chiseled away to gain access to the recorder tape.

One sphere from an Atlas launching floated for two months until found by Barbadian fishermen. The tape was found to be intact and scientifically valuable. The fishermen, incidentally, were convinced that they had found a Russian "Sputnik."



CONDUCTOR — Wilford R. "Wick" Jackson, Astronautics test conductor, was man who directed launch of July 21 Atlas. Nose cone was ultimately successfully recovered.

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Convairiety

San Diego EDITION

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SD Division news office: Plant 1, Bldg. 32, ext. 1071.

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



BONUS—Colored photograph set to be given away in addition to cash prizes under revised Employee Suggestion program are displayed by pretty Shirley Sorokie (Dept. 8-6). F-102 and F-106 desk sets will also be awarded.

Color Photos, Desk Sets Rewards For Best ESs

New "fringe benefits" will be offered through Convair's SD's Employee Suggestion program starting Oct. 12.

Now, not only will personnel be able to win as much as $10,000 for a single suggestion put into effect, but also extra bonuses in the form of colored photograph sets of Convair planes and missiles, and model F-102 ash trays and F-106 desk sets.

E. E. Hartzler, cost reduction supervisor, said the "extras" will be offered for an indefinite period of time under the following ground rules.

Any hourly employee submitting his (or her) first suggestion, and indicating this fact on the ES form, will receive a set of 10 colored photographs if the suggestion is approved and installed.

A similar prize will be awarded the outstanding suggestion installed each week. A special committee will judge ESs for originality, ingenuity, completeness and practicability.

There also will be a monthly winner who will have his choice of a model F-102 ash tray or F-106 desk set.

The large (16x20 in.), four-color photographs are suitable for framing and include the 880, 600, F-102, F-106, B-58, 440, T-29, R3Y, Atlas and Terrier.

"These 'extras' are being offered so that more people will take a cost-conscious approach to their job," Hartzler said. "They are part of a plant-wide campaign promoting the ES program in all departments.

"Most supervisory personnel have been asked to impress their people with the need for con-

(Continued on Page 2)

$178,140 Saving Seen For J. W. Cox's CIP

Top Cost Improvement Proposal installed in the past two weeks at Convair SD was submitted by J. W. Cox, Dept. 170 foreman. His suggested changes in manufacturing sequence and flow of instruments for the compass integrated flight, auto pilot systems on the 880 are expected to mean a savings of $178,140.

Top Employee Suggestion installed in the same period was submitted by Donald H. Yeager, Dept. 115, who earned a $174.50 award for suggesting extension of controls on Arrow Profiler machines to permit more efficient operation.

TV Tube-Shaped Capsule Will House Astronaut

When the U.S. sends its first man into space, he will be inside a capsule shaped like a giant television tube. An Atlas missile will be the means of putting the capsule into orbit around the earth.

Six candidates for the role of space man, all volunteers from the military services, visited Astronautics Division last week to meet Atlas experts.

A prototype capsule, carrying instruments instead of man, was launched Sept. 10 as the payload of Atlas 10-D, fired from Cape Canaveral by a Convair crew with Curtis Johnston as test conductor. It soared out over the Atlantic Missile Range to be recovered later for post-flight analysis.

Convair Astronautics, builder of the Atlas, is working closely with the National Aeronautics and Space Administration (NASA) on the program, which is known as Project Mercury. Unmanned capsule tests, such as the Sept. 10 launch, are called the "Big Joe" phase.

P. E. Culbertson is the Astro project engineer for the program. Other key Astro personnel include: Dr. A. F. Schmitt of the dynamics group; R. V. Battey of aerophysics; C. E. Wilson, who is responsible for developing an instrumentation system capable of detecting malfunctions within the Atlas and initiating abort maneuvers; and Johnston, complex 14 test conductor.

(Continued on Page 3)

First 600 Keel Arrives at SD

Machining of the keel longeron for the first Convair 600 jet transport is due to begin this week in the high bay area of Bldg. 1 at Convair SD Plant 1.

Seven of the lengthy (60 ft.) longerons making up the first order for the Convair 600 program rolled into Plant 1 on schedule the first of last week from the Alcoa mill at Lafayette, Ind.

According to A. E. Kemp Sr., machine shop general foreman, machining operations will get under way the first of October on Convair SD's huge Onsrud spar mill. Maximum capacity of the spar mill, largest of its type on the West Coast, will be required to handle the long pieces of metal which will be the first step in construction of Convair's newest jet airliner. Tooling for machining of the longerons was made on the spar mill and a special cradle for handling them was built by SD plant engineering.

The longeron, which with the underwing canoe, will form key assembly for the Convair 600, weighs 1886 lbs. and is one of the largest extrusion parts made. The pieces were extruded (molten metal squeezed like toothpaste through a die) on Alcoa's 14,000-ton extrusion press, one of the largest in the world.

Use of the single longeron piece for laying the "keel" of a plane first was adopted at Convair SD during construction of the F-102 and has been continued on the F-106, Convair 880, and now, the 600. The one-piece longerons, attached to the outside of the plane's assembly, have proved less costly, stronger, and lighter than the former multi-section method of interior installation, say Convair SD engineers.

Convair SD's design engineers of the body group were working on preliminary plans and specifications for 600 longerons as long ago as September of last year.

"Engineering, purchasing, and vendor efforts were combined to receive the finished product on time and at the minimum cost to maintain the Convair 600 program schedule," commented M. R. Yale, senior group engineer.

Old Globe Tickets Continuing on Sale

Tickets to the first Old Globe Theater production of the season are still available at Convair SD employee services, both plants.

Convair Recreation Association has bought the entire house of 340 seats for the Convair night performance this Sunday (Oct. 4) of "Visit to a Small Planet."

Since the cost of the theater to CRA has been increased this season, explained J. K. Field, SD chief of employee services, it has been necessary to discontinue the previous two-for-price-of-one ticket offer. Reduction of tickets for Convair SD people is now 75 cents on any seat.

Cost of Dependent Insurance Climbs

Increased costs of claims for dependents under Convair SD's group insurance during the past year have necessitated an increase in premiums effective tomorrow (Oct. 1).

The weekly cost will be increased 23 cents (from $2.25 to $2.48) for all employees represented by I.A.M. (whose dependent insurance does not include major medical protection). For all other employees (whose dependents DO have major medical coverage) the increase is 25 cents (from $2.52 to $2.77).

F-106Bs Perform In Demonstration At Andrews AFB

F-106Bs chalked up a highly successful project demonstration Aug. 18-Sept. 4 at Andrews AFB, near Washington, D.C.

With members of the press, military writers, and dignitaries taking turns in the observers' seats, three F-106Bs demonstrated full capabilities of the Convair-built plane and its weapon system in SAGE (Semi-Automatic Ground Environment) conditions.

Completely automatic intercepts were conducted against targets from Andrews' 95th FIS Alert Area. Thirty-eight missions were flown during the three-week period, with at least three scheduled each day, said R. E. Sommers, Convair SD interceptor service supervisor, on the spot as technical representative during the demonstration.

"Not one of the scheduled missions was missed for want of an aircraft," said Sommers in describing the readiness and reliability of the F-106. "Airframe system and reliability made it possible to keep on schedule without difficulty. In fact, flights could have been increased at least 50 per cent without additional support.

"We feel that the entire performance was more than satisfactory with the F-106s proving themselves in every way," he concluded.

Each mission saw a F-106B following a SAGE-directed course to intercept the target, a B-57. After each intercept, the aircraft was flown at Mach 2 speed to further demonstrate its performance.

Pilots of the three planes were Col. W. Clark, commander of F-106 Category III tests at McGuire AFB; 1st Lt. J. Sullivan of Category III Test Force; Maj. Don Sorlie of AF Flight Test Center at Edwards AFB; and Maj. Joe Rogers, ADC Headquarters, Ent AFB, Colorado Springs, Colo. All three planes were flown in from Palmdale, Calif., Convair SD test facility.

Credit was given the Convair SD support team headed by R. L. Johnson. E. A. Fish, maintenance foreman, and his group of 11 ground support men serviced the planes in between missions. J. L. Carton was group engineer. All were from Palmdale facility.

"We especially thank members of the 95th FIS for their assistance throughout the entire program," said Sommers. "It was invaluable!"



FLYING HIGH—F-106 shoots skyward in maneuver like those performed at recent demonstration.

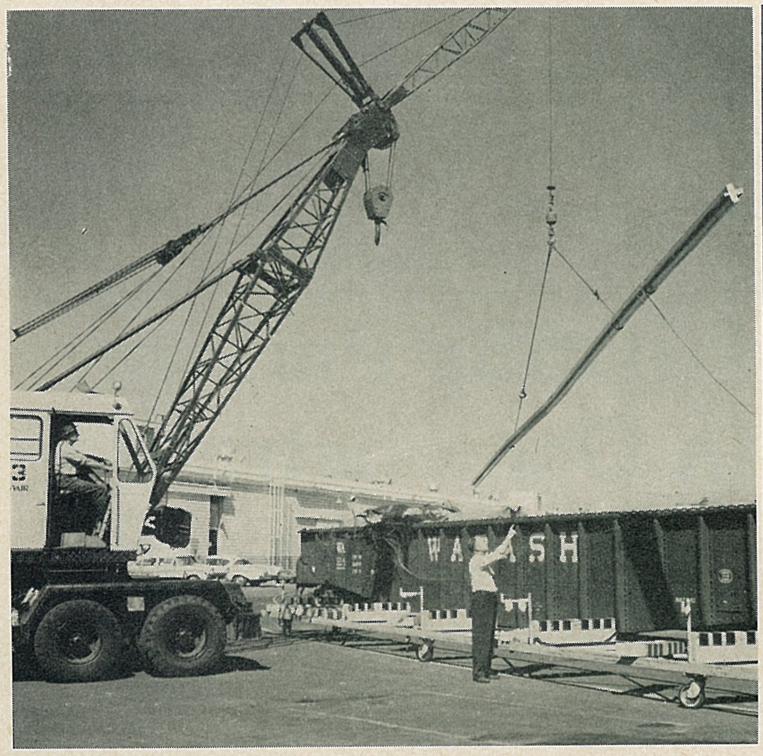
Store Hour Change In Effect for SD

Hours at the Convair San Diego employees store on Pacific Coast Hwy., across from Plant 1, have been changed to 10:30 a.m. to 5 p.m. Mondays through Fridays.

The store, under management of W. E. Rickman, carries household articles, gift items, and jewelry at discount prices for the benefit of Convair people.



"WELL DONE"—Convair SD support team, grinning broadly after fine performance of F-106s at Andrews AFB demonstration, are, left to right (front row), Chuck Benner, John Millard, "Pappy" Swint, Bill Gonyeau, Ron Branstetter, Ed Shemko, Ed Fish. From left in back row are Jim Carton, Red Broadwater, Vern Kampmann, Ed Lavis, Carrol West, John Nicholson, Glenn Pike, Roy Sommers, Dick Johnson, group leader. All except Sommers are based at Palmdale facility.



LONG PIECE—Swinging high in air is first Convair 600 keel longeron as it is unloaded from freight car at Convair SD Plant 1 with J. S. Fisher operating crane and, directing unloading, A. L. Burnett, transportation foreman.

Estimated Saving Approaches $1 Million, Result of 'RX' Ideas

"RX" ideas expected to save almost $1 million have been put into effect so far at Convair SD and not all the proposals have been evaluated.

Figures revealed last week by SD's cost reduction section showed that through Aug. 28 estimated savings stood at $980,836. Of this amount, $755,680 is attributed to 457 ideas installed through Aug. 28. Fifty-three cases, with savings estimated at $225,156, are still in the process of being installed.

Not included in these figures are nearly 100 proposals which are still being studied.

"We are maintaining as fast a pace as possible," E. E. Hartzler, cost reduction supervisor, said.

A further breakdown of "RX" totals through Aug. 28 showed that 5,238 ideas were submitted during the four-month campaign. Hourly participants numbered 2,796. Salaried personnel taking part totaled 1,703.

Savings attributed to ideas submitted by hourly folk total $97,245. Salaried and supervisory personnel accounted for $883,591.

Expected savings from the regular ES and CIP programs for 1959 through Aug. 28 total $1,541,698. Included in this figure are savings from some proposals submitted last year which formed a backlog to be checked and evaluated during the new year.

Together, the "RX" program and the regular ES and CIP programs total $2,297,371 estimated savings during the first eight months of 1959.

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Rewards Go To ES Submitters

(Continued from Page 1)
servation. Critical areas, where cost-cutting is especially needed, have been pointed out," Hartzler added.

Further backing the campaign is a new series of posters displayed throughout the plant, daily reminders of the need for eliminating waste.

"Ideas save Convair money. time or materials. They earn money for the individual and also help to insure our future. They are the best form of job security known," Hartzler emphasized.

ES awards are paid equal to 10 per cent of the dollar net savings figured over a year's time. Extra awards are granted if the idea is adopted by another Convair division. The minimum award is $10; the maximum is $10,000.

(Largest award ever made through the ES program was for $5,639.10, collected by two Plant 2 men for a suggestion recommending the use of a subcontract change letter.)

Suggestions which save between $50 and $100 during the first year merit the minimum award of $10. Those over $100 are figured on the 10 per cent basis.

Awards less than $100 are made in a single payment. Those between $100 and $200 are paid by a $100 first installment and the balance after a six-month audit. If the award is over $200, half is paid at once, and the remainder after six months.

Special Bus Lines Serving Astro, SD

A special bus service for Convair SD and Astronautics people living in the El Cajon area involves two buses running daily to and from SD Plants 1 and 2 and one to the Astro site on Kearny Mesa.

Schedule to the Convair SD plant is: departure from First St. and El Cajon Blvd. at 5:45 a.m. and from Fletcher Hills at 6:08 a.m. The El Cajon bus stops at Bostonia Ballroom at 5:50. They reach Plant 2 at 6:35 a.m. and at Plant 1 five minutes later. Return trips leave the Overpass 2 parking lot at Plant 1 at 3:45 p.m. and arrive in El Cajon at 4:30.

Bus to Astronautics leaves First St. and El Cajon at 5:55 a.m.

Any prospective riders may obtain more information from Wayne Fields (Astro) at HI-5-3748, or Richard Gallagher (SD-Dept. 21-2) at HI-5 3870.

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Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Scholars Hold Summer Jobs

Twenty-four Convair SD scholarship winners, graduate students, and faculty members have returned to their classrooms after a summer spent working for Convair.

This summer's employment at Convair SD for young engineers in training was limited to winners of Convair sons and Management Club scholarships. Two graduate students and nine faculty members for specialized short-term positions completed the list this year.

Of the twelve students who hold Convair sons scholarships, eight reported to work at SD Division: Donald H. Boltz, engineering, Loyola University; Vernon L. Booth Jr., engineering, USC; Charles E. Cartmill, mechanical engineering, Brigham Young University; Larry E. Fisher, engineering, Stanford University; Ronald Knudsen, electrical engineering, Stanford U.; Gary C. Krumweide, engineering, San Diego State; Allan Roy King, who will enter Cal Tech in physics this fall, and John C. Rayko, the other 1959 winner, who will begin work toward a math degree at the University of California at Berkeley.

First graduate under the Convair SD sons scholarship program is Burrell R. Hatcher who received his degree in electrical engineering this June from M.I.T. He is now connected with Electric Boat Division of General Dynamics Corporation.

(Other scholarship winners are Cecil Scott Boyd, attending the U.S. Naval Academy at Annapolis; William L. Dickey Jr., studying in Germany under the Stanford University program; and Deward Manzer, Harvard University.)

Management Club scholarship winners here for the summer were Fred Hunemueller, Melanie J. Rohr, John M. Starr, Nancy M. Sied, and Marcia Fritz.

E. A. Wahrenbrock, studying for his M.S. degree in chemistry at San Diego State, and H. J. Dahlke, taking Ph.D work in civil engineering at Stanford U., were the two graduate students put on the San Diego payroll for the summer months.

Faculty members, most of whom have spent several summers at Convair SD, were Robert G. Arnold, assistant professor in civil and agricultural engineering at the University of Wyoming; Albert R. Harvey, professor of mathematics at San Diego State; Robert W. McCloy, department head and assistant professor of aeronautical engineering at the University of Illinois; Andrew P. Mizisin, instructor of chemistry at San Diego Junior College; John G. Teasdale, assistant professor in physics at SD State; Otto W. Witzell, assistant professor of engineering, Purdue University; Loyal R. Roberts, metals teacher at Dana Junior High School; and Adolph B. Hovde, principal in the San Diego school district.

Airframe Mechanics' Courses Offered

Courses in airframe mechanics and power plant mechanics are being offered at San Diego Junior College. Both courses are certificated by the Federal Aviation Agency and are in addition to the two courses begun last spring in jet aircraft systems and flight engineering.

Convair SD people interested may obtain information from the SD Junior College office, BE-4-8451.

CALIENTE NEXT STOP FOR SD GOLF SWEEPS

Next CRA sweepstakes for Convair SD golfers will be played Oct. 10-11 at Caliente, Ken Wulfemeyer, commissioner, reported. Reservations open today (Sept. 30) at ext. 1705, Plant 1. They close Oct. 7.



WELCOME—H. W. Rubottom, SD chief of educational services (left), greets Capt. T. O. Townes and Maj. K. B. Gorton, AF officers newly - assigned to Convair SD for year.

Two Officers Of AF Report For SD Duty

Two Air Force officers reported to Convair San Diego Division the first of this month for a year's assignment under the "Training with Industry" program.

Maj. Kenneth B. Gorton and Capt. Thomas O. Townes are the third team of AF officers assigned to the division since the San Diego program was begun three years ago.

During their year in training with special emphasis on procurement, Major Gorton and Captain Townes will become familiar with all major operations of the company. They will also spend a short time at Palmdale facility, Convair Pomona, Fort Worth, and Astronautics plants, and General Offices, explained M. M. Saunders of SD educational services, coordinator of the program.

"We have found 'Training with Industry' beneficial to both the Air Force and Convair," said H. W. Rubottom, chief of educational services. "It gives both organizations an opportunity to learn each other's methods of operation and problems, thereby establishing better understanding."

Major Gorton, who holds a command pilot's rating, has been in the Air Force 16 years. He received his M.A. in comptrollership from George Washington University, Washington, D. C. He came to Convair SD from Washington, D. C., where he had been in programming for Air Research and Development for two years.

Captain Townes came to Convair after two years in the accounting and finance division of Air Materiel Command Headquarters, Wright-Patterson AFB, Dayton, Ohio. He received an M.S. in industrial administration from the AF Institute of Technology at Wright-Patterson and has been with the AF eight years.

CRA GROUP HELPS STAGE COINARAMA

Convair SD's Coin Club will be one of the sponsoring groups when the San Diego county Inter-Club Numismatic Council stages its second annual Coinarama in the Lafayette Hotel Terrace Room Oct. 18.

From 9 a.m. until 9 p.m. member clubs of the council will display exhibits, compete for prizes, view movies on coins, conduct drawings and sell coins.

All participants will be charged a 35¢ registration fee. Medals and ribbons will be awarded.

Further Coinarama information can be obtained by contacting Joe Miller, ext. 2067, Plant 1; or Vince Bacon, ext. 2250, Plant 1.

Ehricke 'Science Night' Speaker

Krafft A. Ehricke, director of the Centaur program at Astronautics, will be the principal speaker at Convair SD Management Club's "Science Night" meeting Oct. 14 at the El Cortez Carribbean Room.

Ehricke's topic will be in keeping with the theme of the program and presented in non-technical language. Also on display at the meeting will be large-scale models of missiles and space vehicles.

The business meeting and main address will follow the 5:30 p.m. social hour and 6:30 p.m. dinner. Tickets are now on sale at the usual departmental outlets at Plants 1 and 2. Sponsored by the engineering and experimental departments, the affair is open to members only.

Instructors on 880 Travel Far Afield

Convair SD customer service representatives are traveling far afield to bring latest Convair 880 information to TWA installations.

Five SD instructors are now at TWA's Kansas City headquarters giving an 80-hour course on the line and power plant program. Glen Arner, Harry Addis, Frank Lafonne, John Nowak, and Walt Belliston will conduct classes for TWA instructors and engineers through next week.

Arner went to Kansas City from New York where he had been giving information on 880 flight control changes to key personnel at the TWA facility. Bob Fitzgerald also took the same information recently to TWA people at Los Angeles International Airport.

Clinic in Leadership Scheduled to Start

Convair SD people wishing to improve personalities and expand capabilities in leadership and human relations may sign at SD employee services for a "Sales and Human Relations Clinic."

It will open Oct. 19 at Roosevelt Junior High School auditorium, 3366 Park Blvd., and continue each Monday evening, 7:30 to 10 p.m., for five weeks.

Charles M. Simmons, nationally known human relations consultant, will conduct the course.

Cost of the clinic is $15 per person if five or more sign in a group, otherwise, $18 each. Applications and brochures are available at Convair SD employee services, both plants.

SD Nurse to Attend National Conference

Helen Werdelman of Convair SD Dept. 3-5 left last week for New York City where she will attend the Presidents' Conference of American Association of Industrial Nurses. She currently serves as president of the San Diego Industrial Nurses Association.

Since she is a native of New York and graduate of Roosevelt Hospital in New York City she will be combining a trip home with her attendance at the annual conference.

Symphony Season Will Open Nov. 15

Of special interest to Convair music lovers is the opening of the San Diego Symphony season. First concert will be Nov. 15 with Earl Bernard Murray, new director and conductor, directing. Guest artist will be Jerome Hines.

All of the five concerts of the winter series will be played in Russ Auditorium at 8:30 p.m. Tickets are available at Thearle Box Office, 640 Broadway, SD.

SD AND ASTRO COUPLE WED

Dorris Engstrum of Convair SD Dept. 6-51 and Walter K. Beyer (Astro Dept. 290) were married Sept. 5. A reception followed at the home of Mr. and Mrs. Sigurd Ziegler (SD-Dept. 6).

Sergeant 'Bushed' But Safe, Healthy After 68 Hours in Capsule

Sea-going tests of the crew escape capsule for the B-58 Hustler were highly successful, Convair Fort Worth engineers said after an airman subsisted nearly three days and nights at sea in waters off Key West, Fla.

"Not that we don't still have some problems," said Tino Sierra, design engineer. "But the tests indicated that our basic design is fundamentally sound, insofar as enabling a downed airman to survive if he parachutes into water."

Capsule guinea pig was Air Force M/Sgt. William C. Barbour, 33, who rested, slept and ate in the capsule when he wasn't exercising on top or swimming around it. Test took 68 hours.

A Navy vessel dropped the capsule and occupant into the sea and stood by throughout the three-day test. The capsule floated free in daytime and was tethered to the Navy craft at night.

Watching the capsule as it bobbed in the ocean were representatives from Wright Air Development Command; Stanley Aviation; Convair Fort Worth; U. S. Navy, and others.

Maintaining almost constant communication with Convair people on the scene was George C. Cherbonnier, material department senior buyer whose prime responsibility is obtaining a proper capsule from the maker, Stanley Aviation Corp. of Denver.

At the scene for Convair were Dr. Zane Gaut, who observed effects of the test on the airman; Al Cornell of flight; Jerry Ratliff and Earl Miller, who recorded the test in motion pictures and stills.

"That was one bushed airman," Dr. Gaut commented. "But he could have ridden it out even longer had it been necessary."

He said that the sergeant's physical condition afterwards was excellent and that he apparently experienced no significant discomfort.

Weather conditions varied from rain squalls and thunder storms (with winds up to 30 miles an hour) to periods of almost glassy calm under a hot tropical sun. Waves up to four feet high broke over the capsule at times.

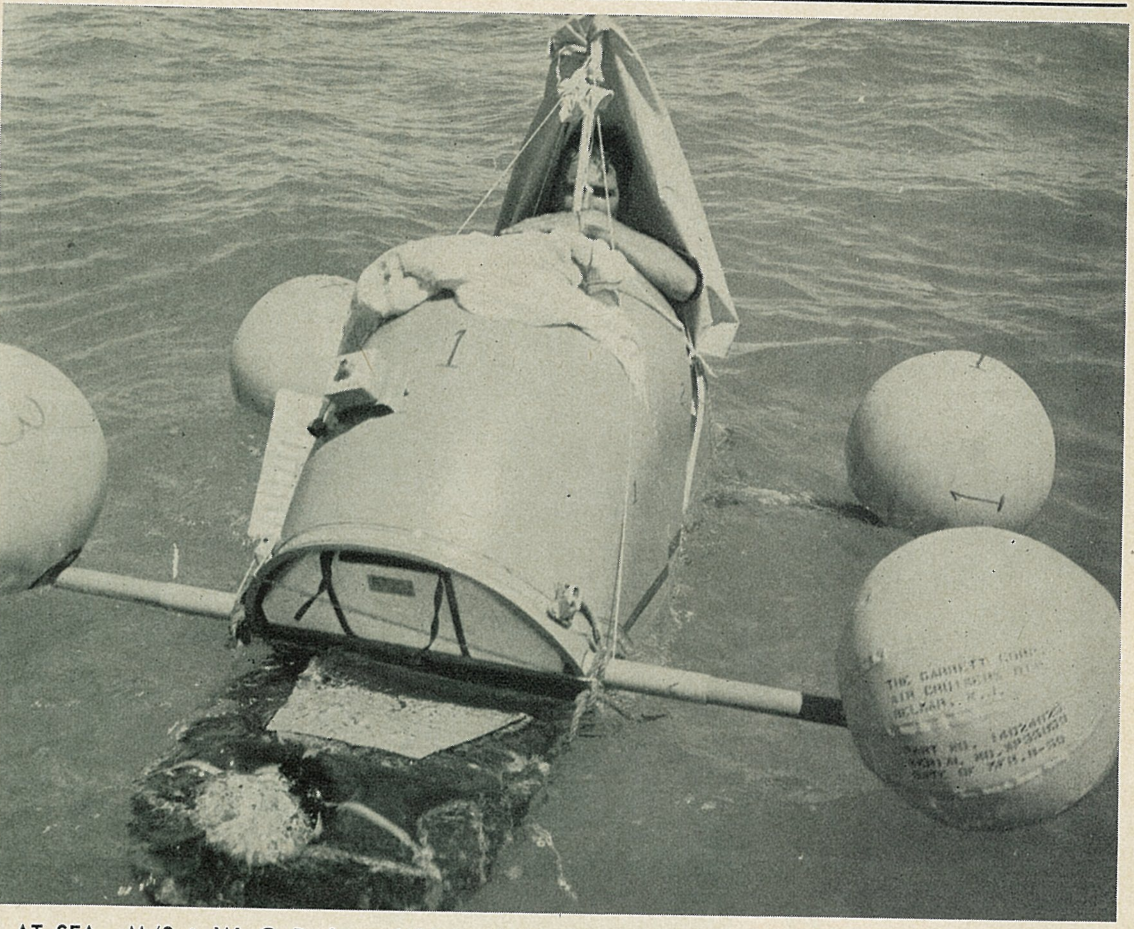
The wedge-shaped escape capsule is approximately 24 inches at its widest point, 40 inches from front to back and 64 inches high. It is designed for ejection at supersonic speeds and would descend to earth's surface by parachute. It contains equipment, food and water for a minimum of 72 hours at sea. Equipment shares space with automatically operated machinery designed to restrain the occupant in an ejection position, close the capsule doors and pressurize the interior. When afloat four built-in "bladders" keep the capsule on the surface and upright.

Four From SD Attend Toastmistress Meet

Four members of Convair's Delta Toastmistress Club No. 889 represented the group at the planning meeting of the Southwest Regional Conference of International Toastmistress Clubs.

Attending the meeting in Los Angeles last Saturday (Sept. 26) were Joyce Simon (Dept. 2-2), chairman of the Speakers' Bureau; Martha Woodberry (Dept. 3-2), hospitality chairman; Fran Leland (AF office), Council No. 7 chairman; and Marge West (Dept. 6-71).

Delta Club will join other clubs of Council No. 7 in hostessing the Southwest Regional Conference to be held in San Diego in June, 1960.



AT SEA—M/Sgt. W. C. Barbour, Wright Air Development Center Aerospace Medical Laboratory technician, is shown during his three-day cruise aboard B-58 escape capsule. Capsule is designed to carry crewman safely through supersonic ejection at high altitude, then land him by parachute. In water it becomes effective raft.

Project Mercury Astronaut to Ride In Capsule Shaped Like TV Tube

(Continued from Page 1)

The capsule, from which the first astronaut will view space, is about seven feet in diameter at the base and 10 feet high. When in place it forms part of the Atlas missile's nose. A special boom, carrying escape rockets, towers above the capsule. This will be jettisoned after the capsule is actually in orbit.

McDonnell Aircraft Corp. is developing the capsule.

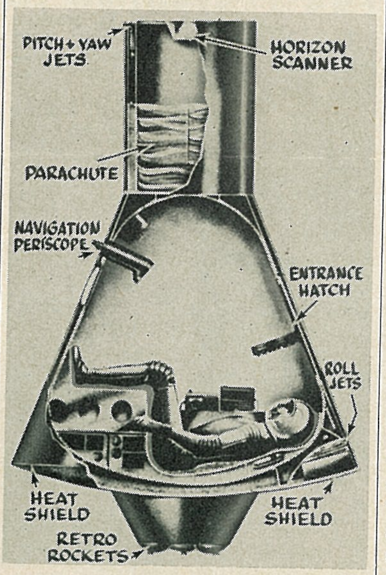
The capsule's passenger rides in a couch-like seat. At take-off and during re-entry of the atmosphere he is in a supine position (on his back) to better withstand "G" load during critical periods.

Entrance to the snug cabin is via a hatch at the side. A quick-opening door at one end will be used for exit at termination of the flight. The interior of the pressurized cabin contains environmental and control systems, communication equipment and instrumentation. A form-fitting suit worn by the astronaut provides a second, separate environment.

Inside the cabin, within easy reach, is a periscope and an array of flight and communications control panels. In another compartment are recovery parachutes and survival gear.

Across the capsule is a special heat shield and below the shield is a package of retro, or retarding rockets.

Present plans call for the capsule with its passenger to orbit the earth at an altitude of from 100 to 150 miles for as long as 24 hours. Special tracking stations and communications centers around the globe will keep in touch with the capsule. It is



expected that the astronaut will be in voice communication with the ground stations much of the time.

From takeoff to landing the entire operation is automatic. Interior controls, however, allow the astronaut to override the automatic devices at any time. Escape rockets allow the astronaut to eject from the entire capsule, should emergencies arise.

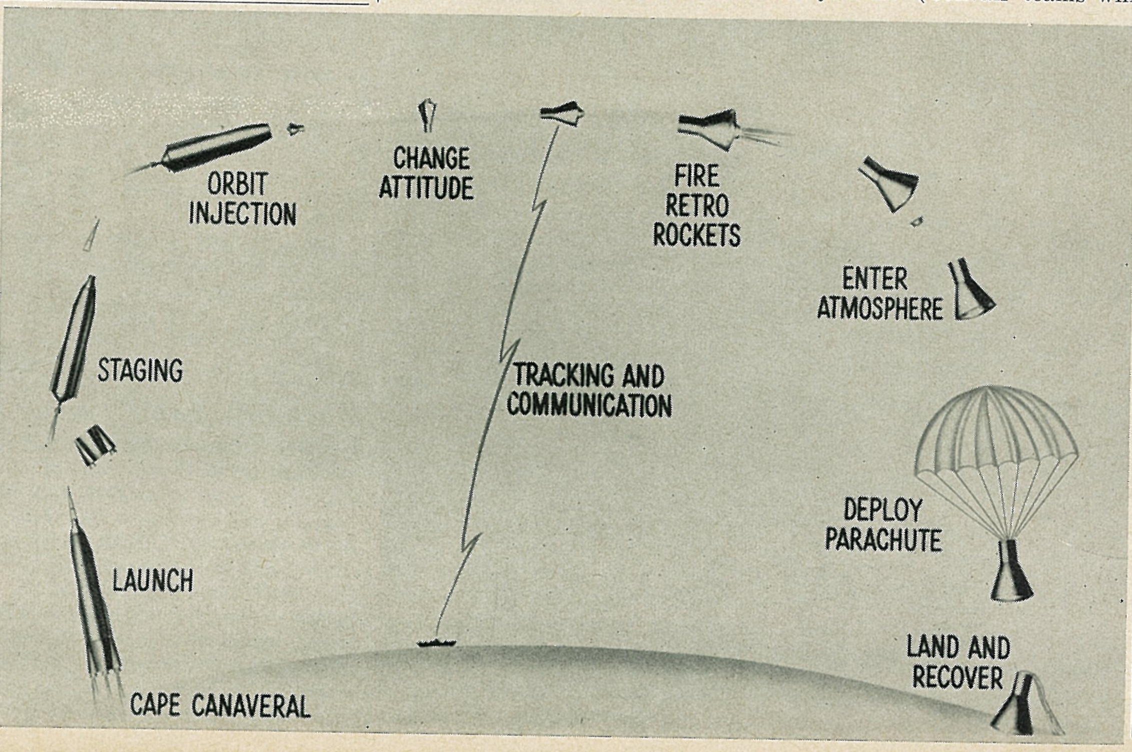
Normal countdown procedures are planned during the launch, with some added time for capsule subsystems. (Convair teams will man the blockhouse for all Atlas shoots involved in Project Mercury.) Once launched, the Atlas follows normal staging. First the booster section falls away, then the sustainer engine burns out and special charges break away the cone and separate it from the missile body.

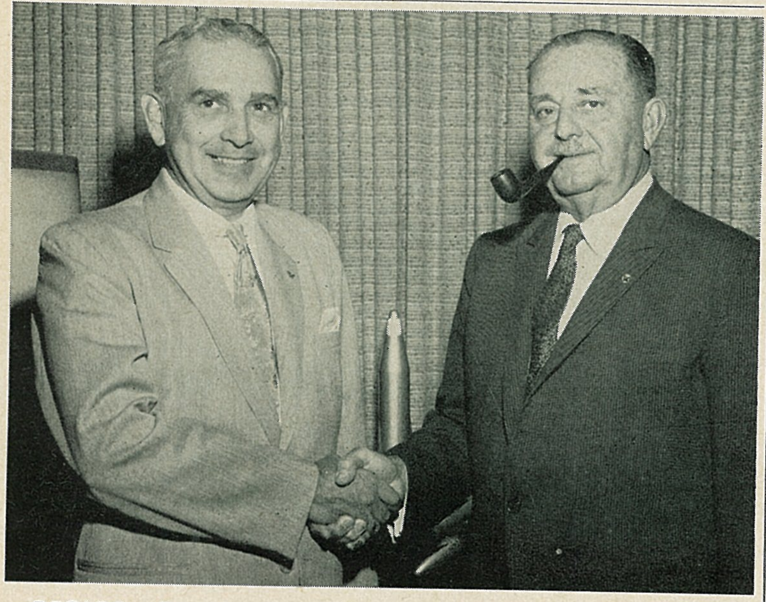
Once in orbit, the astronaut will be able to control pitch, roll and yaw from within the capsule. In the weightlessness of space, a simple jet-like charge is enough to change position.

As time approaches for descent, the astronaut fires his retro rockets, slowing the capsule until the earth's gravity takes effect and draws it earthward. For the arc of re-entry, the capsule position is turned base down.

Nearing the earth, a parachute opens to slow descent. Still closer, a second parachute blossoms to further reduce speed. As the astronaut will land in water, special flotation bags are arranged to inflate when needed. Survival gear includes a life raft, a radio that starts signaling when needed and a flashing beacon to attract recovery units.

Recovery operations will roughly duplicate those followed in nose cone and data capsule recoveries (**Convairiety**, Sept. 16, 1959).





DECADE—Convair President Jack Naish, left, has been with Convair now for 10 years. He is shown receiving congratulations from I. M. Laddon, member of General Dynamics Corporation Board of Directors and former long-time Convair executive.

Convair Makes Four Graduate Awards

Four graduate scholarship awards have been announced by Convair San Diego Division.

The one-year awards, $1,000 each, for 1959 have gone to Jorgen Aastad, working for his Ph.D. in electrical engineering at Stanford University; Russell C. Anderson, M.S. in mechanical engineering; Robert H. Borcherts, M.S. in nuclear engineering; and John M. Leinonen, M.S. in mechanical engineering, all three at the University of Michigan.

250 Enrolled at FW In 21 TCU Courses

About 250 are enrolled in 21 Convair FW Texas Christian University classes, according to Jess Putts of educational services.

Three classes, for which about 50 have registered, may be taken for graduate credit. Classes started Sept. 21 in the plant.

F-102 Teams Will Compete

Six F-102 teams from the United States, Europe, and the Pacific area are in intensive training preparatory to the annual world-wide U. S. Air Force Gunnery Meet at Tyndall AFB, Fla., next month.

Project William Tell II, set for Oct. 14-23, will see Convair-built F-102As competing with other of the nation's long-range fighters in the weapons competition.

Crack aerial marksmen will represent the 525th Fighter-Interceptor Squadron at Bitburg, Germany, only F-102 squadron assigned to the North Atlantic Treaty Organization; 317th FIS from Elmendorf, Alaska; and 16th FIS based at Naha Air Base, Okinawa.

Squadrons chosen to participate from the three sectors of the United States will be 482nd FIS, Seymour Johnson, N. C.; 326th FIS, Richard-Gebaur, Mo.; and 460th FIS, Portland International Airport, Ore.

Higgins Shifts To Astro Post

Effective tomorrow (Oct. 1), A. P. Higgins, manager of military relations for SD Division, will transfer to Astronautics Division as head of a new Atlas base activation department.

Meanwhile, R. L. Johnson, former Convair chief engineering test pilot at Edwards AFB, will join military relations at SD to specialize on the F-106 program. H. J. Richardson continues to supervise the military jet transport and related programs; W. R. Rauth continues in charge of electronics promotional programs; and W. H. Mollering heads administrative and military relations functions dealing with Army and Navy contacts.

Each of the four reports to SD Division Manager B. F. Coggan for promotional and administrative activities. For technical aspects of new developments in assigned product areas they will report to W. W. Fox, SD chief engineer.

Convair Reservists In Same Squadron At Los Alamitos NAS

Six Navy reservists, hailing from three Convair divisions, this month completed 14 days of training with Anti-submarine Squadron 771 at Los Alamitos NAS, Calif.

They are R. O. Richardson (Dept. 1-52), H. B. Root (Dept. 288-2), J. A. Ballard (Dept. 271), J. A. Jette (Dept. 133), all Convair San Diego; A. H. Hoines (Dept. 576-1, Astro); and M. J. Hopkins (Dept. 24, Pomona). Hoines is commanding officer of the squadron.



REUNITED—Six Convair men got together recently during annual Navy Reserve training tour at Los Alamitos Naval Air Station. Left to right: J. A. Jette, ADR2; Lt. R. O. Richardson, electronics officer; J. A. Ballard, ADRC; H. B. Root, AMH2; Cdr. A. H. Hoines; M. J. Hopkins, AN.

Mother Cat and Five 'Satellites' Find Homes With Astro Families

Atlas and her five "satellites" have disappeared from the Astronautics plant after commanding attention for over three months.

Atlas is a mother cat, white with a grey tail and head. She first appeared in the CRA recreation area near the Astro plant about a year ago. At that time she was a "loner," keeping a safe distance from CRA volunteers working there. In time Atlas made friends with the four children of Jim Conklin of CRA. Her reserve diminished gradually.

About three months ago Atlas produced five kittens which were promptly named Vega, Mercury, Centaur, Apogee and Terrier.

After moving her brood several times to different locations in the CRA area, Atlas settled for a time in the salvage yard and later set up housekeeping even nearer the plant. Employees fed them regularly and they were the pets of the area.

One by one the kittens were "adopted." Atlas herself and the last two kittens found a home with Mona Ormsbee of Dept. 215 who will consider offers to adopt one of the kittens. Call ext. 1300. Character references advisable.



LUCKY KITTENS—Atlas, mother cat, and kittens Vega, Centaur, Mercury, Apogee and Terrier seem to be leading happy life, cuddled by Paulette Veal, Carole Cooper, Joan Clifton and Mona Ormsbee of Astronautics.

Safety Meetings at FW to Stress Fire Prevention Next Week

One hundred ninety-five lives were lost in 50 aircraft industry fires during 1958.

Major industrial fires during the same year numbered 261 with a total dollar loss of over $52 million. (Major fire classification means a loss of at least $250,000.)

Convair Fort Worth, because of the recent tragic burning of a B-58 Hustler, will be tabulated in these figures for 1959.

Prevention of another such disaster as well as any other fires will be stressed in all Convair departments during National Fire Prevention Week, Oct. 4-10, announced Fire Chief C. H. Jones of Convair FW.

The increasing number of B-58s in production means increased fire hazards at Convair.

How to deal with these hazards will be the subject for employee and supervisory safety group meetings before and during Fire Prevention Week, according to Chief Safety Engineer F. R. Temple.

Since this is the time of the year when people get their furnaces and stoves ready for cold weather, the meetings will also include instruction on prevention of home fires.

Convair FW, with about 2,400 fires including two airplane blazes since 1942, has a relatively low industrial fire record.

But it will not stay that way without constant vigilance of each employee, said Temple.

This is why Temple reminds Convair employees to remember all year long the prevention week slogan: "Fire Prevention Is Your Job, Too."

F-102s Triumph In Rocket Test

The F-102-equipped 16th Fighter-Interceptor Squadron of Naha Air Base, Okinawa, proved the outstanding squadron of the Pacific area in a recent rocket-firing competition.

Scoring a perfect tally, the 16th FIS triumphed over all other squadrons in the Fifth Air Force in "Operation Small Change," a bi-annual rocket meet to test combat capability.

Top rocket-wielders, controllers, individual technicians, together with maintenance support, are determined on number of aircraft in commission, number of planes airborne, target hits, and planes returned to operation in minimum time. Pilots and ground-control directors submit detailed written examinations, results of which are included in the scoring.

Maj. Charles R. Foster commanded the winning squadron.

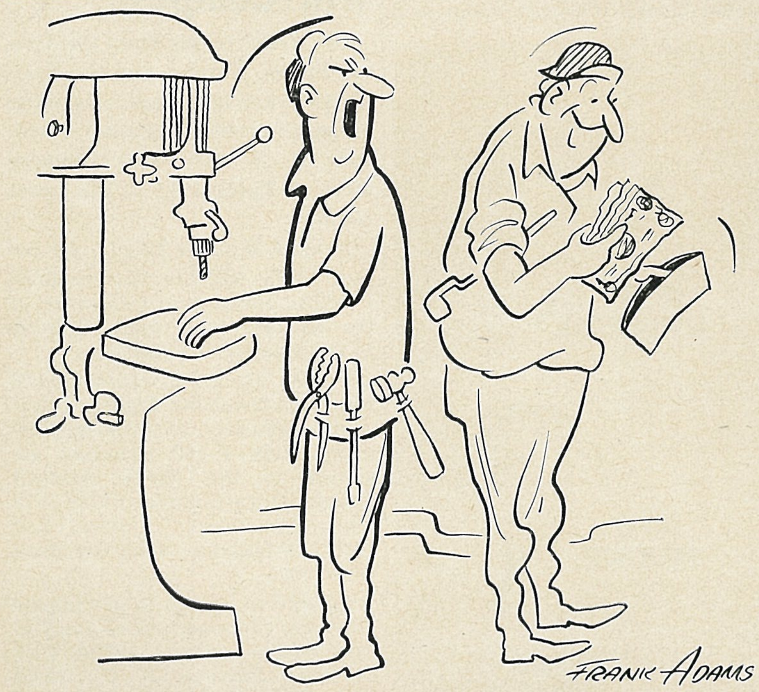
SD Tool Engineers Meeting Scheduled

Student Chapter 23 of the American Society of Tool Engineers will meet Oct. 9 at 7:30 p.m. in the Machinist Union Hall on Pacific Hwy. in San Diego.

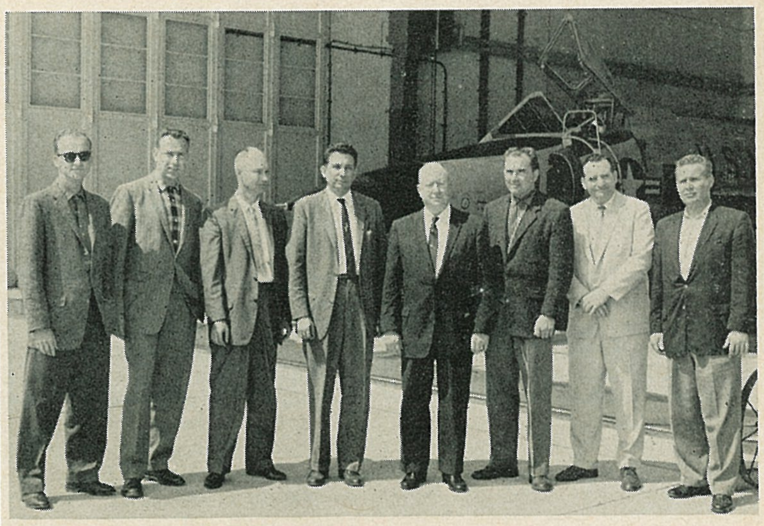
All charter members prior to April 10, 1959, will receive ASTE pins at the meeting. "A New Era in Tooling Through Magnesium" will be discussed by John R. Gibson of the Reliance Magnesium Co. of Los Angeles.

SCHUBERT NAMED AREA GOVERNOR

Hal F. Schubert, Convair FW industrial engineer, president of Cowtown Toastmasters, has been named area governor in Toastmasters International. His area includes clubs in Denton, Arlington and Fort Worth.



"Just borrow the tools you have to have, Crabtree . . . and put all that other stuff back where you found it!"



OVERSEAS—Snapped at Bitburg AFB, Germany, with Convair field service reps attached to F-102-equipped 525th FIS during recent European trip are A. P. Higgins, assistant SD manager—military relations; L. E. Ottem, SD chief project engineer; and R. M. McIver, military relations. From left are O. B. Johnson; Norm Picard; Ottem; C. H. Clements, European area supervisor; Higgins; G. S. Mathews; McIver; and John Morris.

Lunchtime Composer Produces Two New Tunes—Between Bites

Composing music on his lunch period is paying off for modern jazz pianist James A. Ecker of Convair Fort Worth's Dept. 35.

Ecker has been jotting down notes between bites of sandwich since arriving at Convair in 1956. Now he has two new records soon to be released on the Bayou label entitled "Jivaro" and "Monday Night at 8 p.m."

Ecker studied music at Boston University and now plays with the Curley Broyles dance band. He's also working throughout Fort Worth with the Harvey Anderson Jazz Group and has accompanied such singers as the Crew Cuts, Johnny Ray and Charlie Applewhite.

While in the Army, he had a television show in Lawton, Okla., and has done spot work for Fort Worth stations.



INTERMISSION—Convair FW's James A. Ecker pauses during intermission at local night spot. He is composer and arranger.



"SILENT GEORGE"—Opossum recently "hired in" at FW stationery stores on voluntary basis. Captured by B. J. Bain, L. K. Ellis and J. P. Gaston, all Dept. 4-5, and nicknamed George, mascot was released after disproving dictionary, which says an opossum, when caught, feigns death. George was wide awake and never batted an eye.

50-Word Essay on Good Neighborliness Wins 25-Day All-Expense Trip to Peru

Only 50 words—but because of them, C. Wayne Collum of Convair FW service engineering is enjoying an all-expense-paid trip to Lima, Peru.

"Just for fun" Collum recently wrote a contest essay on why he would like to attend the First Pacific International Fair in Lima.

Since he had worked in South America for two years, he had a genuine interest. He stressed a personal feeling of good neighborliness as his main reason.

Collum was at work on Sept. 12 when sponsors called to tell him he had won the 25-day trip.

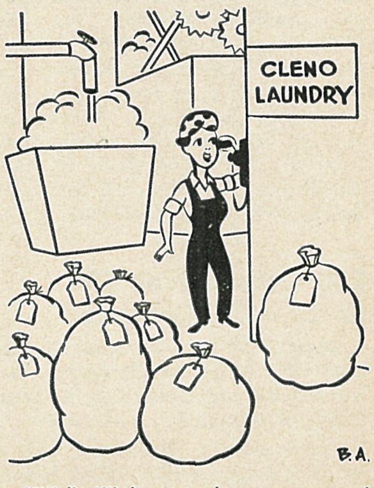
"I almost fainted," Collum admitted.

Collum is combining his vacation with a leave of absence. He left with Mrs. Collum from New Orleans Sept. 23.

Margaret Fahlstrom Given Scholarship

Margaret A. Fahlstrom of the materials and processes lab at Convair SD has been awarded a one-to-three-year scholarship to study medical microbiology at Stanford University.

The pre-doctoral scholarship is set up under the auspices of the National Institute of Health Research, Division of Analogies and Infectious Diseases.

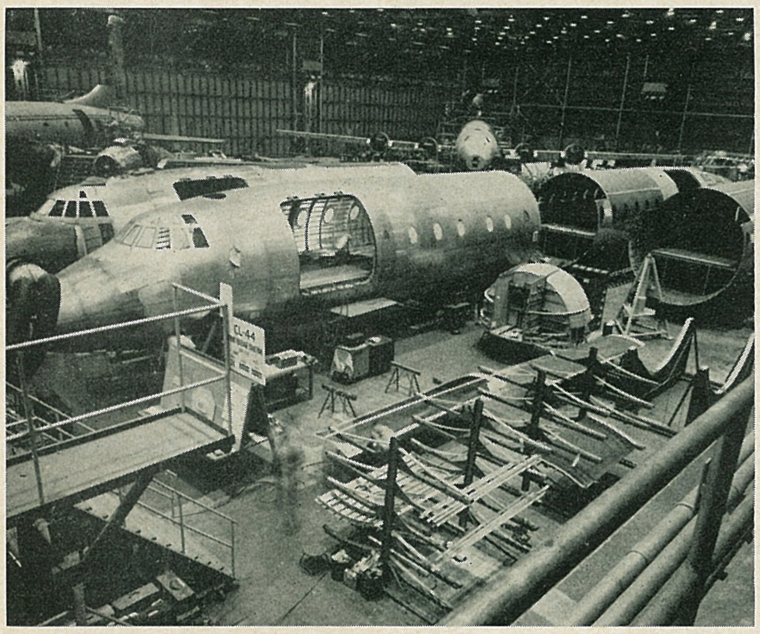


"Well, I'll have to hang up now. I have a few things to rinse out."

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair, Limited of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.



PROGRESS—Airframe assembly of second Canadair CL-44 turboprop is well advanced. Fuselage and wings have been mated and tail is being added.

CAPITAL PR OFFICE IN NEW LOCATION

WASHINGTON, D. C.—General Dynamics Corporation public relations office here is now located in new accommodations at 1710 H. Street N.W. The new telephone number is REpublic 7-5151.

Besides the corporate office, divisions represented are Convair, General Atomic, Electric Boat, Stromberg Carlson and Canadair Services, Ltd. Night telephone numbers for these divisions are:

Canadair Services Ltd. RE-7-5155

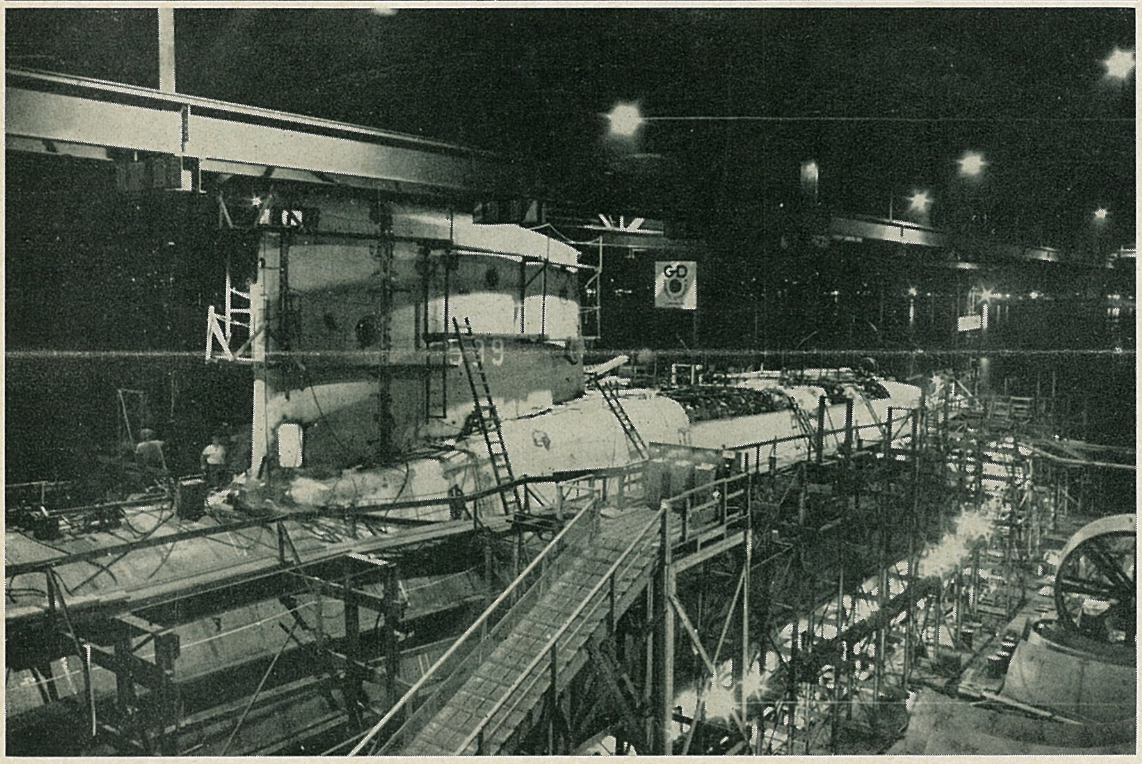
Convair RE-7-5156

Corporate Office RE-7-5157

Electric Boat RE-7-5158

General Atomic RE-7-5159

Stromberg-Carlson RE-7-5160



LAUNCHED—Night shift photo at Electric Boat shows last-minute rush to ready ballistic submarine Patrick Henry for launching last week. Less than 16 months have elapsed since keel laying, a construction record for nuclear subs.

Electric Boat Launches No. 7 Atom Sub in Record 16 Months

GROTON—Electric Boat Division's seventh atomic submarine, the Patrick Henry, was launched here last week (Sept. 22).

None of her predecessors took shape so rapidly, however, for it has been less than 16 months since the keel for the 380-foot, 5,400-ton, ballistic missile (Polaris) sub was laid. Electric Boat pulled out all the stops in an accelerated production drive. They chopped two months off their best previous efforts, established on the pioneer atom sub Nautilus and equalled on the first missile ship, George Washington.

Even post-war conventional subs, involving no complex systems like nuclear propulsion and ballistic missile weapons, consumed more construction time on the ways than the highly complicated Patrick Henry.

The Patrick Henry will have special stabilizing equipment to provide a smooth ride even when on the surface in heavy seas. The Patrick Henry will roll very little because it has an automatic torque-resisting device known as a gyrostabilizer mounted within the ship's hull. A small sensing gyroscope picks up the first indication of a rolling motion and activates an hydraulic system which keeps the ship on its horizontal plane, resisting the rolling force of wave action.

The gyrostabilizer weighs 50 tons and the Navy considers inclusion of this device well worth the space investment.

The equipment is manufactured by Sperry Gyroscope with General Dynamics responsible for installation.

★ ★ ★

GROTON—The keel for the nuclear submarine Ethan Allen, lead ship of a new class of fleet ballistic missile (Polaris) submarines, was set down without ceremony Sept. 14 in the North Yard at Electric Boat Division. The sub is named for the frontier hero who led the Green Mountain Boys of Vermont in Revolutionary War action.

Subs of the Ethan Allen class will be 410 feet long, an increase of 30 feet over the original Polaris-firing sub, George Washington, which is now being outfitted for sea trials here.

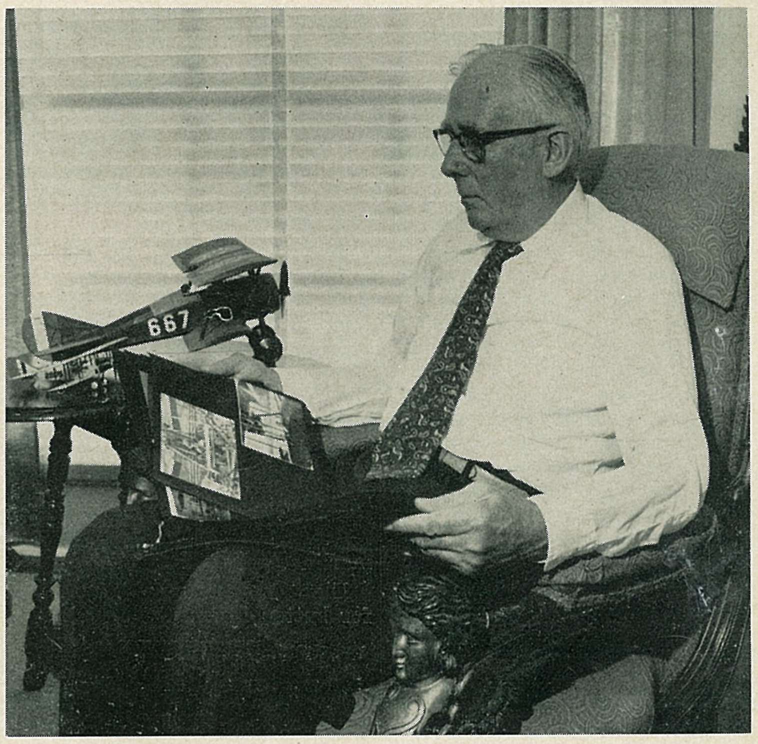
STROMBERG NAMES MARKETING MANAGER

SAN DIEGO—Appointment of Warren C. Dunn as manager of marketing for Stromberg-Carlson at San Diego has been announced by Dr. Donald G. Wilson, general manager.

SECURITY SOCIETY ELECTS EB MAN

LOS ANGELES—Eric L. Barr Jr., industrial security director of Electric Boat Division, has been elected president of the American Society for Industrial Security during the Society's annual convention here.

Previous posts held by Barr in the organization have been secretary and second vice president.



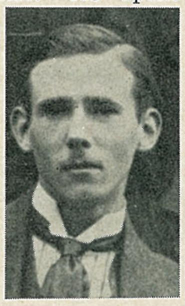
NOTED DESIGNER—B. Douglas Thomas, prominent designer of early aviation days, is shown in his La Jolla, Calif., home where he has retired. He left Consolidated on "leave of absence" more than 25 years ago. Last week he joked, "I may come back to work one of these days."

Model J Plans Drawn In 'Tent' Office Abroad

(Following is installment No. 18 in Convairiety's continuing history of Convair. This and Sept. 16 installment deal with early days of Thomas Aeronautical Co. and Thomas-Morse.)

B. Douglas Thomas (no relation to William T. Thomas who founded Thomas Aeronautical Co., **Convairiety**, Sept. 16, 1959) came to the United States in 1914 at the request of Glenn Curtiss.

B. Douglas was born in England, Nov. 27, 1891 and had entered the Vickers Sons & Maxim plant at Erith in 1907 as an engineering apprentice. He spent most of the four-year period in Vicker's aviation division. In 1912, when he was 21, Thomas took employment as assistant chief engineer with the newly founded Sopwith Aviation Co. of Kingston-on-Thames. The plant was a former roller skating rink and the engineering department occupied the old orchestra balcony.



Thomas in 1914

One day in 1913 the noted American aviator, Glenn H. Curtiss, visited the plant. He was touring British aviation establishments while en route to Russia where he hoped to open a factory.

"I was too shy to talk to him, but I tagged along while he went through the plant," Thomas has recalled. "He spent half the day with us."

"I rarely went to London, but that night I happened to be there. When it started to rain I ducked into a little shop on the Strand for shelter. Another fellow was there, reading a paper. After a moment he lowered it, looked at me, and spoke. It was Curtiss. I was amazed that he remembered my face."

The two struck up a conversation. It developed that Curtiss was interested in building a "British-type" tractor biplane, a design to which Sopwith and

B. Douglas Thomas left Consolidated in the early '30s on "leave of absence" and for the last 20 years has been a resident of the San Diego area, in retirement. A son, Andrew M. Thomas, is a design specialist in engineering at Convair Pomona and soon will receive his 20-year pin.

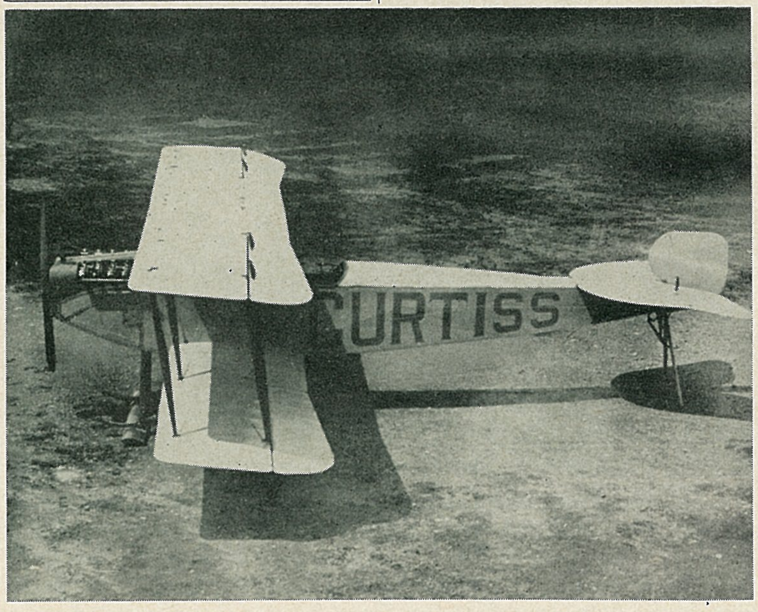
other European manufacturers were turning. (In America the pusher was still dominant.) Curtiss was leaving for Paris and offered to pay the way if Thomas consented to accompany him for further talks. The young engineer made the trip. Influenced by Curtiss, he resigned from Sopwith and began designing the Model J. This became one of the first American aircraft of "modern" configuration (having propeller, radiator, engine and cockpit arranged on the same axis, and with the engine and cockpit enclosed).

The winter was mild and Thomas used a tent in his yard as a draftsman's office.

"I had to draw the plane, stress it, and make up the whole bill of materials," he recalled later. "They sent me a photograph of the Curtiss OX engine but no dimensions. I had to do some guessing there. And I had to travel 20 miles to get blueprints made."

Thomas forwarded the plans to Curtiss at Hammondsport, N. Y., as work progressed. He had no settled agreement with the American, and suspected he might wind up in Russia as manager of a Curtiss factory. He received a cable in April, 1914, however, which he recalls as reading simply: "Come on over. Curtiss."

He sailed as soon as he could pack and arrived in New York City May 2.



MODEL J—This was airplane that B. Douglas Thomas designed while working in tent in England, shipping plans to Hammondsport, N.Y., where it was built. From this ship, and Model N, famous World War I "Jenny" was developed.

University of Iowa Alumni Organizing

A call is out to all graduates of the University of Iowa at Convair Astro and SD to make themselves known. John Gustason of Convair SD engineering and Keith Blair, SD chief librarian, are spearheading an effort to form an alumni association within Convair. All alumni of the Iowa City school are urged to call Gustason, ext. 2070, or Blair, ext. 1543, at Plant 1.

Hunter Safety Course Slated

A hunter safety course, especially timely for the opening of hunting season, starts at 9 a.m. Oct. 10 at the Convair Gun Club, Gillespie Field.

It continues at the same time for three weeks. California law specifies no minor may be issued a hunting license without completing the course.

CRA at San Diego is sponsoring the event which is open to all boys and girls capable of taking a written examination. Sessions include care and use of firearms, plus actual firing under the direction of instructors.

Advance registration is not necessary and parents are urged to attend. Rifles are available and ammunition is supplied at cost.

SWEETWATER ALUMNI ASKED TO ORGANIZE

Alumni of Sweetwater High School now working at Convair SD are asked to contact Martha Woodberry, ext. 1245, Plant 1, if they are interested in helping map plans for the Nov. 6-7 homecoming of the National City school.

Log Book Entries

Promotions

SAN DIEGO

Promotions to or within supervision effective Sept. 14:

Dept. 3-1, Industrial Relations: To guard lieutenant, D. E. Dunn.

Dept. 4-0, Material Office: To material services asst. supervisor, R. H. Horton.

Dept. 6, Engineering: To computer group engineer, H. W. Buckner. To reproduction asst. supervisor, R. D. Johnson.

Dept. 8-4, Industrial Engineering: To systems & procedures supervisor, C. E. Gross.

Dept. 15-3, Customer Service: To service parts administration asst. supervisor, R. H. Gill.

Dept. 115, Machine Shop: To asst. foreman, W. H. Hand.

Dept. 190-2, Manufacturing Development & Process Specifications: To manufacturing development supervisor, S. Leith.

Dept. 267, Model 8 Final Assembly: To asst. foreman, C. L. Nored Jr.

Dept. 271, Model 8 Field Operations: To foreman, J. P. Corrao.

Dept. 288-2, Inspection—Plant 2: To inspection asst. supervisor, F. R. Roberts.

Service Emblems

SAN DIEGO

Service emblems due during the period Sept. 16 through Sept. 30.

Twenty-year: Dept. 1-25, R. F. Ashe; Dept. 6-31, R. C. Westbrook; Dept. 402-6, J. L. Siever; Dept. 406, Fred Kirkman.

Fifteen-year: Dept. 6-51, M. L. Johnson, A. H. Ruddy; Dept. 120, J. B. Ruiz; Dept. 171, W. A. Anderson; Dept. 215, H. L. McDowell; Dept. 218, E. A. Galindo; Dept. 266, G. C. Allin; Dept. 267-0, A. M. Lintvedt; Dept. 280, Jack Bryan; Dept. 400-1, Pearl B. Stanley.

Ten-year: Dept. 1-17, Maxine R. Binion; Dept. 6-51, K. L. Beck; Dept. 14-4, Helen G. Garren; Dept. 15-5, H. W. Wilson; Dept. 31, E. G. Firkins, C. E. Wolfe; Dept. 34-1, L. E. Small; Dept. 44-1, R. L. Kellogg.

Dept. 180, J. F. Shirley; Dept. 188-7, Iola P. Alameda; Dept. 216, Trudie D. Stewart; Dept. 223-0, L. G. Kennedy; Dept. 231, Marcella M. Hardesty; Dept. 232, J. L. Punneo; Dept. 267, H. H. Green; Dept. 406, J. V. Priest Jr.; Dept. 600-2, L. E. Crossley; Dept. 603-7, W. J. Smith.

Personals

SAN DIEGO

I wish to express my sincere appreciation for all the kindnesses and sympathy shown by our Convair San Diego friends at the death of my husband, Harry A. Graun, Dept. 15-6.

Mrs. Harry A. Graun

Retirements

SAN DIEGO

HAGBLOM—O. W., Dept. 25-9. Seniority date Jan. 22, 1953, retirement effective Sept. 18, 1959.

HALL—Henry C., Dept. 101. Seniority date, Feb. 16, 1951, retirement effective June 2, 1959.

Births

SAN DIEGO

DENTON—Daughter, Carol Dian, 4 lbs., 8 oz., born June 14 to Mr. and Mrs. R. B. Denton, Dept. 403.

DOHM—Son, Michael Francis, 7 lbs., 13½ oz., born Sept. 19 to Mr. and Mrs. F. L. Dohm, Dept. 403.

DUCHENE—Son, Doug Alan, 7 lbs., 6 oz., born Aug. 22 to Mr. and Mrs. D. P. Duchene, Dept. 6.

PEDRIN—Daughter, Nennette, 7 lbs., 9½ oz., born Sept. 10 to Mr. and Mrs. P. A. Pedrin, Dept. 401.

Deaths

SAN DIEGO

GRAUN—Harry A., Dept. 15-6. Died Sept. 8. Survived by wife, Grace Clara.

WARD—Patrick J., Dept. 3-1. Died Sept. 12. Survived by wife, Dirce S.

Six Winners Named In Fishing Contest

Catches of yellowtail, marlin, bonito and bull bass qualified for prizes in the August fishing contest sponsored by the CRA Fishing Club at SD.

Heading the list, and earning a $15 prize, was a 26-lb., 10-oz. yellowtail caught by C. H. Goodding (Dept. 267). Second prize ($10) went to M. C. Sullens (Dept. 232) for a 188-lb. marlin.

Two $7.50 awards, both for bonito, were pocketed by R. W. Menzie (Dept. 31) and L. Budzynski (Dept. 101). G. G. Grantham (Dept. 230) and F. L. Romig (Dept. 188-6) qualified for $5 awards with bull bass and marlin catches.

Eight fishermen also qualified for button awards.

Joint 'Rallyette' Gets 58-Car Field

Fifty-eight cars turned out for a three-and-one-half-hour "Rallyette" sponsored by the Convair SD Sports Car Club and the Rohr SCC earlier this month.

An Astronautics team placed first in the meet, followed by a combined SD and Astro team made up of Tom Kienholz (Dept. 6) and George Kendall.

A future activity on the club's calendar is a picnic Oct. 18. Details will be formed at the group's Oct. 7 meeting in the Natural History Museum, Balboa Park. Meetings start at 7:30 p.m. and are held the first and third Wednesday of the month. Anyone interested in joining the club should contact Skip Carpenter, ext. 2451, Plant 1.

CRA Archery Club Wins Round Robin

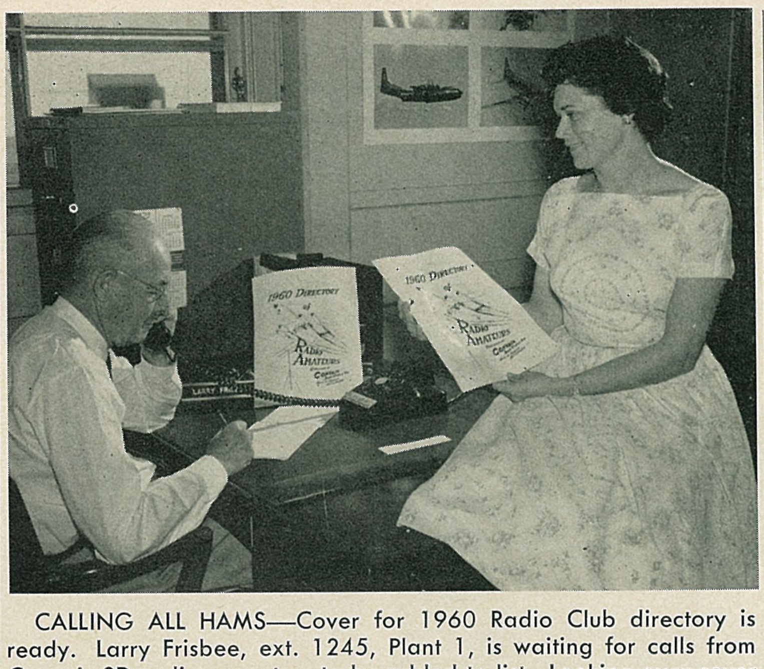
Attendance at Convair SD's first round robin archery contest was high, despite absence of archers who attended the state target shoot and others who trekked off to hunt in Utah, J. B. Bence, club spokesman, reports.

Winners in the free-style class were John Platt (Dept. 416), and Al Stone (Dept. 277). Bare bow honors went to Harry Ross (Dept. 392), championship class; Al Phipps (Dept. 360), Class A; Tom Boling (Dept. 255), Class B; and Warren Osborn (Dept. 174), Class C. George Butts took first in the Little Beaver class.

New Square Dance Class Next Week

First beginners square dance class will be held next Monday (Oct. 5) at 8 p.m. at the American Legion Hall, 4061 Fairmount Ave.

Membership will remain open for a three-week period after the first class, then close until next year. All ages can join and novices are welcomed in singles, couples or squares at the classes which extend over a three-month period.



CALLING ALL HAMS—Cover for 1960 Radio Club directory is ready. Larry Frisbee, ext. 1245, Plant 1, is waiting for calls from Convair SD radio operators to be added to list. Looking over cover is Martha Woodberry of employee services.

Deadline Near For Ham List

Only 10 days remain for active and inactive radio hams at Convair SD to register for the 1960 club directory, J. B. Baker, commissioner, reports.

The club hopes to list all licensed ham operators (both past and present) in the directory. Baker said the entry deadline is Oct. 10 and asked operators to personally phone information (call letter, address, plant dept., etc.,) to Larry Frisbee, ext. 1245, Plant 1.

Next club event, a potluck dinner, will be held tomorrow (Oct. 1) starting at 6 p.m. at Pecan Park. Members should bring their own food and charcoal; the club will provide drinks and dessert.

Starting time for regular club meetings has been changed to 7 p.m., Baker added. He also said the club was recently awarded the W.A.S. (Worked All States) achievement certificate.

First Call Sounded For Junior Bowling

A junior bowling league for Convair SD sons and daughters is being contemplated, but its formation will depend upon the number of entries received, Jim Hayman, bowling commissioner, reported.

He said the CRA will support a junior keg league if enough interest is shown. "We are asking Convair SD parents, who have children interested in joining a league of this type, to send in a post card with the name, age, and address of the prospective bowler," he added.

Cards should be sent to Jim Hayman, 7342 Canton Drive, Lemon Grove. If the league is formed, it will most likely roll on either Saturday or Sunday at an alley centrally located for the majority of participants.

Lens Club Slates Talk on Quality

SD Camera Clubbers will get tips on "Paper Choice and Print Quality" Oct. 12 when Mrs. Alice Rogers, a member of the Photographic Society of America, addresses the 7:30 p.m. meeting in the Balboa Park Photo Arts Building.

Ron Ainsworth, club spokesman, said the presentation should be of special interest to serious-minded camera fans who wish to increase their knowledge of black and white processing.

Football Film Set For Oct. 6

Football fans at Convair SD will have a chance to see a lunchtime film next Tuesday (Oct. 6) from noon until 1 p.m. in the Bldg. 14 auditorium at Plant 1.

John Gustason of engineering procedures and Keith Blair, chief librarian for SD Division, are spearheading the effort to bring University of Iowa football films here for the benefit of Big Ten enthusiasts.

The Oct. 6 movie will show the U. of Iowa team in action during the 1958 season. More football movies of the Big Ten leader will be obtained if enough interest is shown. Seating will be on a first-come, first-seated basis as the capacity of the auditorium is limited to about 150 persons.

Walker Wins First In Pistol Tourney

W. G. Walker cracked through to victory for the first time in the master class of a Convair SD Pistol Club shoot Sept. 13 at the Police Range.

Walker tallied 287 points, two better than his nearest competitor, B. L. Broadway, who scored 285.

In the expert class Ralph Benson paved the way with 253 points and Mrs. Dorcas Utter took honors in the sharpshooter class, registering 276 points.

Ranked in the top three positions in the short national match event were Broadway, Jim Halfacre and Ralph Picard.

CRA Calendar

(In view of the fact that Convairiety now carries the complete CRA calendar only at intervals, it is suggested that readers may desire to clip for future reference.)

★ ★ ★

AEROMODELERS — Call Gary Witt, ext. 2405, Plant 1. Meet Sunday mornings, 8:30 a.m., Clairemont-Mesa field.

ARCHERY—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. Club meets third Thursday of each month, 7:30 p.m., CRA Clubhouse. Workshop in clubhouse open each Tuesday and Thursday, 7-9 p.m. Monthly shoots on second Sunday of each month.

ART CLUB—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. Club meets by notice only.

ASTRONOMY—Keith Sears, commissioner, ext. 2900, Plant 1. Club meets first and third Fridays, 8 p.m. at CRA Recreation Area, Gillespie Field, El Cajon.

BADMINTON—Tom Richardson, commissioner, ext. 2780, Plant 1. Organized play and instruction Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park. Open play for Convair employees and their families each day.

BALLROOM DANCING — Martha Woodberry, commissioner. Call ext. 1245, Plant 1, for information. Grace McGrath, BE-4-8686. Grace McGrath Dance Studio, 1322 Fifth Avenue.

BASEBALL—Pete Beyrer, commissioner, ext. 1245, Plant 1.

BASKETBALL—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. (GIRLS' TEAM: Call Jean Todd, ext. 1017, Plant 1.) All teams play at Muni Gym, Balboa Park.

BOWLING—Jim Hayman, ext. 1155, Plant 1; Mike Brooks, ext. 583, Plant 2, commissioners.

BRIDGE CLUB—Pete Beyrer, commissioner, ext. 1245, Plant 1. For information call Frank Westphal, ext. 2225, Plant 1. Meetings first and third Tuesdays, 7:30 p.m., at Hotel Barcelona, 326 Juniper St.

CAMERA CLUB—C. E. Schultz, commissioner, ext. 289, Plant 2. Regular meetings second and fourth Mondays, 7:30 p.m., Photo Arts Bldg., Balboa Park. Darkroom in CRA Clubhouse available to club members.

CHESS CLUB—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. Club meets each Wednesday, 7:30 p.m., CRA Clubhouse. Sets available for lunch period games.

CHORAL CLUB—Martha Woodberry, commissioner, ext. 1245, Plant 1. W. A. Vogel, director. Rehearsals each Monday, 7:30 p.m., CRA Clubhouse.

COIN CLUB—Gil Crosthwaite, commissioner, ext. 1245, Plant 1. For information call Joe Miller, ext. 2067, Plant 1.

DELTA DIVERS — Tom Richardson, commissioner, ext. 2780, Plant 1. Meet fourth Tuesday of each month, 7:30 p.m., Conference Bldg., Balboa Park.

FISHING — Dale Cromartie, commissioner, ext. 1650, Plant 1. Club meets third Tuesday of each month, 7:30 p.m., Gillespie Field Clubhouse. Boat Building, E. R. Fink, chairman, ext. 1144, Plant 1.

GARDEN CLUB—E. L. Zimmerman, commissioner, ext. 2120, Plant 1. Club meets second Wednesday of each month, 7:30 p.m., Floral Assoc. Bldg., Balboa Park.

GLIDER CLUB—Call CRA headquarters, ext. 1245, Plant 1. Meetings by notice only.

GOLF—Ken Wulfemeyer, commissioner, ext. 1705, Plant 1. Convair Golf Club, call Harold Purnell, ext. 1313, Astronautics.

GUN CLUB—Jack Swank, ext. 1161, Plant 1; Gene Horstman, ext. 753, Plant 2, commissioners. Club meets second Tuesday of each month, 7 p.m., Gillespie Field Clubhouse. Club shoot, rifle, trap and skeet, first Sunday of each month at CRA range overlooking Gillespie Field, El Cajon. Open shooting each Sunday.

HORSESHOES—Kurt Klein, commissioner, ext. 507, Plant 2.

ICE SKATING—Bud Davies, commissioner, ext. 3587, Astro. Skating sessions for Convair employees and their families each Thursday at Iceland, 6055 Lake Murray Blvd. Special Convair rates between 6:30 and 8 p.m.

JEEP CLUB—Seasonal outings only. For information call Gil Crosthwaite, ext. 1245, Plant 1.

JUDO — Pete Beyrer, commissioner, ext. 1245, Plant 1. Instruction each Thursday at 7 p.m. in CRA Clubhouse on Pacific Hwy.

MODEL RAILROAD — Bud Davies, commissioner, ext. 3587, Astro. Meetings each Friday at 7:30 p.m., House of Charm, Balboa Park.

MOVIES — Reduced-price movies each Tuesday night at Academy Theater, 3271 University Ave. Adults, 25c; children, 15c.

PISTOL CLUB—Ash Bishop, commissioner, ext. 1761, Plant 1. Home phone, HU-8-3460. Club shoots second and fourth Sundays of each month at 9 a.m., San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB—J. B. Baker, commissioner, ext. 491, Plant 1. Club meets Thursday after issue of **Convairiety**, 7 p.m., at Radio Club Headquarters, Harbor Drive.

RIDING CLUB—Marc Beresford, commissioner, ext. 1777, Plant 1. C. L. Pogorel, co-commissioner, ext. 691, Plant 2.

ROCKHOUNDS — Dan Whorton, commissioner, ext. 426, Plant 1. Lapidary classes Mondays, Tuesdays and Wednesdays, 7-9 p.m., Rockhound Shanty. Classes for second shift, Tuesdays, 12:30-2:30 p.m. Regular meetings second Thursday of each month, 7:30 p.m., Gillespie Field CRA Clubhouse.

ROLLER SKATING — Convair skate night third Monday each month. Free tickets at employee services offices. Saturday matiness each week, 2-4:30 p.m. Skateland, Front and G. Admission 25c per person for Convair employees and their families. Admittance by club membership card. Cards available at employee services, both plants.

SKI CLUB—Joe Harris, commissioner, phone AT-4-0278 evenings. First meeting will be held in November.

SOFTBALL — Tony Berardini, ext. 2910, Plant 1; Gil Crosthwaite, ext. 1245, Plant 1, commissioners.

SOLO FLYERS—Vic Korski, commissioner, ext. 1262, Plant 1. For ground school information contact Rex Robinson, ext. 1636, Plant 1. For commercial ground school call Bert Shields, ext. 2788, Plant 1. For Link Trainer instruction call Ken Condra, ext. 2770, Plant 1.

SPECIAL EVENTS and COMMISSIONERS-AT-LARGE — Eddie Robinson, ext. 296; Paul Pearson, ext. 345, both Plant 2; Jerry Schultz, Palmdale.

SPORTS CAR CLUB—Gerry Wright, commissioner, ext. 1130, Plant 1.

SQUARE DANCING—P. E. Liggett, commissioner. Call ext. 1245, Plant 1, for information. Beginners and intermediate classes Mondays, 8 p.m., American Legion Hall, 4061 Fairmount Ave. Advanced classes Tuesdays, 7:30 p.m.; party night, fourth Saturday of month, 8 p.m., both at University Heights Community Center, 4044 Idaho St.

STAMP CLUB—Jack Benedict, commissioner, ext. 507, Plant 2. Club meets first Thursday of each month, 7:30 p.m., Conference Bldg., Balboa Park.

SWIMMING — Pete Beyrer, commissioner, ext. 1245, Plant 1. Family swim night first Saturday of each month, 7-9:30 p.m., at Mission Beach Plunge. Last swim night of year Oct. 3.

TABLE TENNIS—Pete Beyrer, commissioner, ext. 1245, Plant 1.

TROPICAL FISH—Pete Beyrer, commissioner, ext. 1245, Plant 1. Club meets second Tuesday each month, 7:30 p.m., CRA Clubhouse. Workshop every Tuesday and Thursday, 7 p.m.

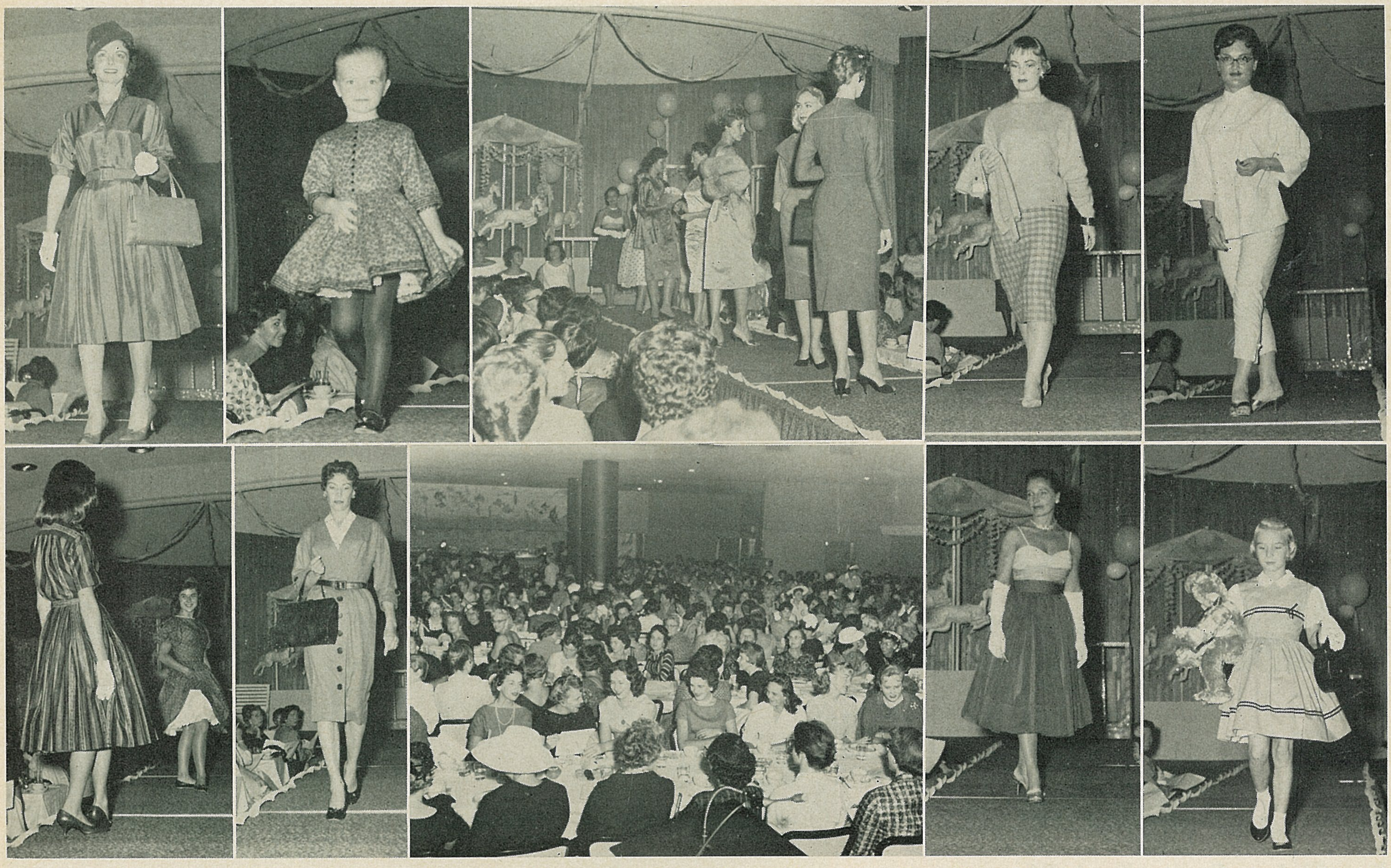
VOLLEYBALL—Pete Beyrer, commissioner, ext. 1245, Plant 1.

WATER SKI CLUB—T. E. Mathews, commissioner, ext. 1117, Plant 1.

WOMEN'S ACTIVITIES — Martha Woodberry, commissioner, ext. 1245, Plant 1.



CHAMPS—Dept. 280 team emerged winner of shop league softball at Convair SD, sweeping last two games of play-off series with Dept. 31. They received trophies at awards banquet this month at Plant 2 cafeteria. From left (top row): Dean Hoffman, Frank Chenelle, James Pate, John Eldridge, Gene Everson, Les Phillips. Bottom row (from left): H. L. Dodd (manager), Richard Schweitzer, M. L. Robinson (Dept. 280 CRA representative), Bob Walker and M. A. LaFrance. Not available for pix were team members Phillip Mullins and Ron Miller.



STYLE PARADE—Colorful "Fall Fashion Carousel" staged by Women's Activities at Convair SD attracted full house (lower center) at El Cortez Caribbean Room. Models included (from left, top row): Sunny Cooper (Air Force office); Sharon Black (daughter of Anita Black, Dept. 98); in center models line ramp; Melissa Empey (Dept. 11); and Joyce Simon (Dept. 2-2). Bottom row, from left: Suzanne Murdock (daughter of T. D. Murdock, Dept. 6); and Nancy Smith (daughter of Earl, Dept. 34, and Mary Smith, Dept. 6); Melba Brown (Dept. 95); group shot; Virginia Hollister (Dept. 1-16); Rhonda Hampton (daughter of C. R. Hampton, AF office).

Gun Club Plans Shoot, Drawing

A Convair SD or Astro man will possibly be one of the best dressed hunters in the area after the CRA Gun Club shoot Oct. 4 at Gillespie Field.

Shotgunners will compete for a camouflaged duck hunting parka; rifle shooters (.22 caliber) will have a chance to win insulated underclothing.

No entry fee will be charged for the jointly-sponsored shoot which starts at 9 a.m. In addition to the clothing, other prizes will also be awarded.

* * *

Entries for the annual big game drawing are now being taken at Convair SD and Astro employee services locations.

Contest rules specify that all hunters successful in bagging big game (deer, elk, bear, etc.) are eligible to register for the drawing which will be held Nov. 10 at an evening meeting of the Gun Club.

In addition to employees, immediate family members are also eligible. Entry blanks are available at employee services locations. They should be filled out and returned to either employee services or one of the Gun Club commissioners, Jack Swank at SD, or Ezra Johnson at Astro.

Disneyland Issues New Member Cards

New membership cards in Disneyland's Magic Kingdom Club are now available to Convair SD people at SD employee services, both plants. Old membership cards are no longer valid.

Magic Key books of tickets, exclusively for industrial employees, may be obtained at the park box office upon presentation of the membership cards. The cards also make holders eligible for "Family of the Month" awards.

The books contain admission to Disneyland and 10 coupons good for any ride or attraction, including the new submarine voyage, bobsled runs down the Matterhorn, and monorail rides. Discount prices are \$3.50 for adults (regular \$6.25), \$3 for juniors (\$6 value) and \$2.50 for children (\$4 value).

CRA Sports & Recreation Convairiety

Both Solo Flyer Ground Schools Launch New Classes in October

Both ground schools sponsored by the CRA Solo Flyers at Convair SD will start new classes during the next two weeks.

Would-be pilots will be able to prepare for FAA private pilot's exams by taking the course taught by Rex Robinson (Dept. 6). Students have choice of attending a Monday or Wednesday evening series of classes at 7:30. First sessions will meet Oct. 5 and 7 at Jim's Air Service, Lindbergh Field.

Cost is underwritten by CRA and instruction extends over an 18-week period. Subjects covered include general flight information, civil air regulations, radio procedure, engine and aircraft structure. Students may sign at class time or contact Robinson, ext. 1636, Plant 1.

* * *

A commercial ground school course is open to all Convair SD folk and family members who have already taken the basic ground school instruction or hold a private license.

Taught by B. A Shields (Dept. 15), the class is limited to 25 students. It meets every Tuesday and Thursday, between 7 and 9:30 p.m., also at Jim's Air Service. The new series gets under way Oct. 13.

Cost of the 10-week course is roughly 50¢ an hour or a total of \$25, considerably below what the course would cost without CRA sponsorship. Reservations can be placed by contacting Shields, ext. 2788, Plant 1.

Also available for flying enthusiasts who have already earned their private license is Link Trainer instruction. The Link is set up directly adjacent to the Solo Flyers classroom.

Reservations for one-hour lessons can be made by calling instructor Ken Condra, ext. 2770, Plant 1. A \$5 lesson fee is charged.

70 Trophies Given To Summer Bowlers

Summer league bowlers from Convair SD held their annual awards banquet at Michael's Restaurant in Lemon Grove Sept. 26.

Mike Brooks, commissioner, reported that 70 trophies were given away by CRA to both team and individual winners.

* * *

Solo Flyers' Open House This Friday

Convair SD folk interested in private aviation are invited to attend an open house and meeting of the CRA Solo Flyers Oct. 2 at 7:30 p.m. in the club's classroom location at Jim's Air Service, Lindbergh Field.

"We hope to broaden our program to include social activities for the family as well as concentrating on educational courses," Vic Korski, commissioner, stated.

"To achieve this end we hope to get as many aviation-minded people together as possible so that we can share their ideas for a bigger and better club program."

If possible, Korski said the club will elect new officers and committee members. The no-dues structure of the present ground school will be retained, although more social activities and family affairs will be planned, he added.

For more information call Swen Allgren or Dick Watt, ext. 1602, Plant 1.

Capacity Crowd Views SD Fashion 'Carousel'

A "standing-room-only" crowd of over 1,000 Convair San Diego women, wives, and daughters jammed the Caribbean Room of El Cortez Hotel to view the newest styles shown at CRA's "Fall Fashion Carousel" Sept. 15.

Opening the show, a group of gaily-dressed young people, all Convair SD people or sons and daughters, dashed onto the stage in "going to the fair" fashion to provide the carnival atmosphere for the show. William Bird of Astro Dept. 344 (located at SD Plant 2) hawked his wares as boys and girls snatched large pink and white balloons and whirled around the make-believe merry-go-round of pink and white horses.

Convair San Diego models, dressed in a wide range of fashions—from leisure-time wear to the height of formal garb—walked down the ramp in tune with the sparkling commentations of Mrs. Edith Antelline, SD charm school director. Ensembles and shoes were furnished by La Jolla shops and fashionable eye wear by La Jolla Opticians.

Playing background music was W. N. Appleton of Thearle Music Co. Hostesses were members of the CRA Women's Activities Auxiliary.

"We feel that our fall fashion show was a huge success," said Martha Woodberry, CRA commissioner of women's activities. "We have had many favorable comments from spectators and credit the stage setting arranged by M. M. Saunders and his crew with creating a lively and different atmosphere."

October Dates Set For Water Ski Club

Water skiers at Convair SD will meet next Tuesday (Oct. 6) in the CRA Clubhouse at Gillespie Field to discuss two important club events scheduled for later in the month.

Tentative arrangements have been made for another trip to Salton Sea Oct. 10-11 and a Halloween dinner and dance at the Gillespie Clubhouse Oct. 31, T. E. Mathews, commissioner, reported.

SD skiers were second best at a dual competition with the Carlsbad Boat and Ski Club Sept. 13, Mathews said. Only local member to place in the competition was Mrs. Bobbie Treahy (wife of Jack Treahy, Dept. 180).

Mathews said the club is now converting the outboard boat to an inboard and equipping it with a 160-hp. V-8 engine. For more information on club events contact Gene Sevigny, BR-3-0828.

Second Shift Keg Lists Still Open

Second-shift bowlers are needed to fill two Convair SD leagues at Pacific Recreation, Mike Brooks, commissioner, reports.

One is a Tuesday 11 a.m. league, the other rolls Saturday morning at 1:30. Both are handicap leagues.

Inquiries should be directed as soon as possible to Jack Norris, ext. 470, Plant 1.

Plant Chess Champ Tourney Scheduled

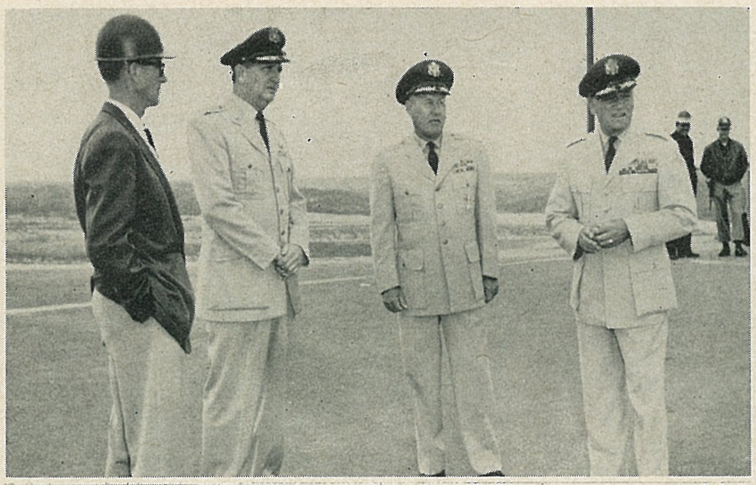
Chess enthusiasts will match moves for the Convair SD plant championship starting at 7 p.m. Oct. 7 in the CRA Clubhouse on Pacific Hwy.

Tourney structure will depend upon the number of entries, but competition will probably extend over a six-week period of Wednesday evening games.

No entry fee is charged and all Convair SD chess players, whether club members or not, are invited to participate. At tourney's end, the SD champ will meet his Astronautics counterpart in a special match.

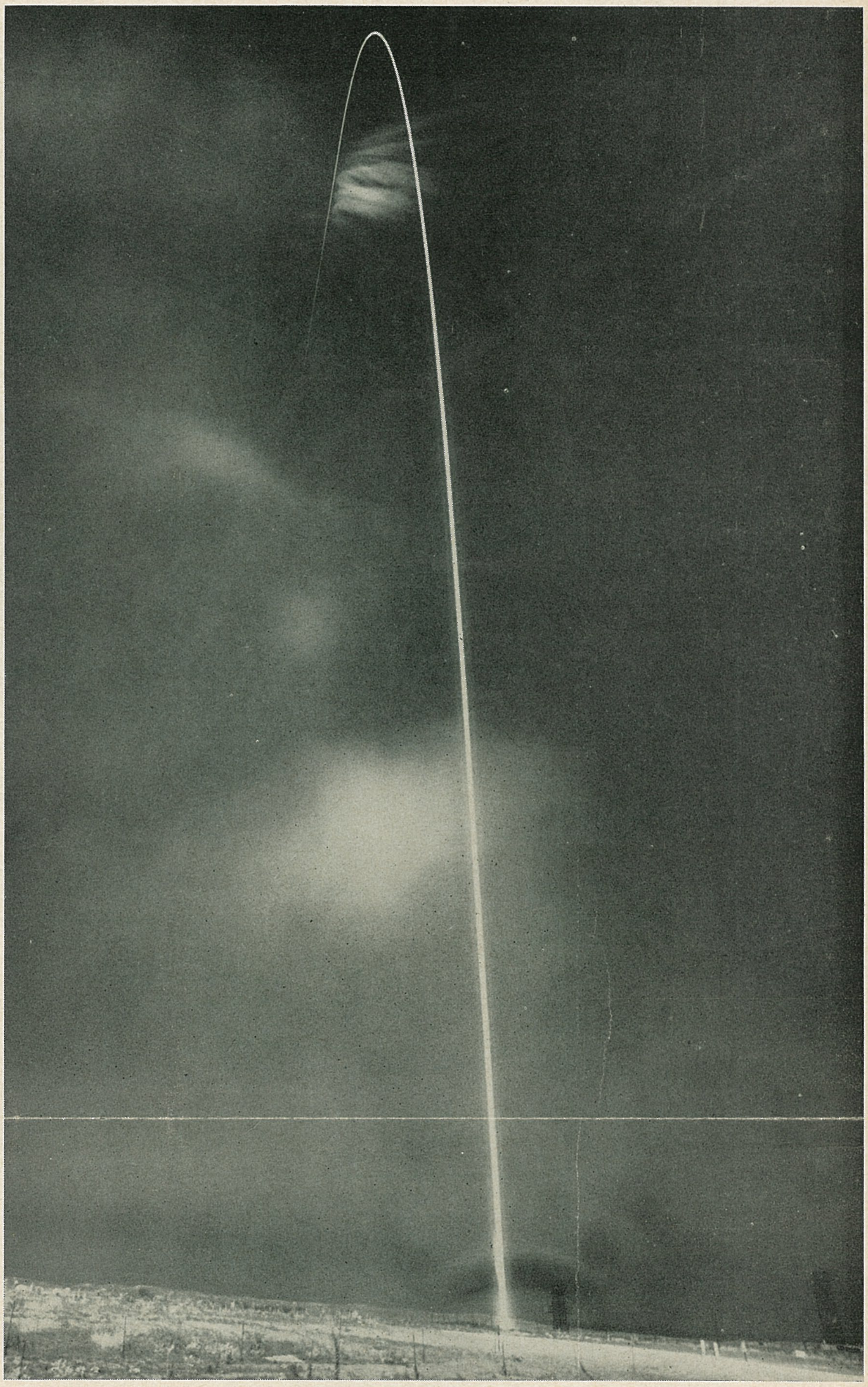
GAS CONTEST PLANNED FOR SD AEROMODELERS

Aeromodelers at Convair SD will hold their semi-annual, three-event gas contest Oct. 18 at the Clairemont-Mesa Blvd. site between 8 a.m. and 1 p.m., Gary Witt, club spokesman, reported.





CHEERS—Top brass was on hand for first Atlas launching at Vandenberg AFB, Calif., Sept. 9. In top picture, from left, are F. H. Miller, Convair manager at Vandenberg; Maj. Gen. Davis Wade, 1st Missile Division commander; Gen. Thomas Power, SAC commander; Maj. Gen. A. J. Old Jr., 15th Air Force commander. Below, Miller reads next day's newspaper.



ON UP AND UP—First Atlas fired from Vandenberg, Calif., arcs across Pacific in this dramatic time exposure taken by Astronautics photographer Henry Kierstead. Cloud effect at top actually was caused by contrail (vapor trail). Blown by wind, time exposure makes this appear as cloud.

SD Develops Electric 'Stick' For Flying Super-Fast Planes

Development is well advanced at Convair SD on a radically new system for piloting the unbelievably fast-flying aircraft of the future.

It involves electricity and "black boxes" to operate control surfaces, instead of conventional mechanical means. The pilot's control inputs are transmitted to hydraulic control surface systems by wires and electronics instead of mechanical linkages.

"The control requirements of many higher-performance flying craft are such that human response limitations must be compensated by automatic control systems if the pilot is to accomplish his mission successfully," explained E. H. Price, project supervisor.

The "electric stick," a small side-located stick about six inches in length, replaces the conventional control stick used on most planes. Operating forces are only a third of those employed with the present center stick.

Force transducers generate electrical signals to command aircraft responses. Signals are transmitted to electronic computers which act as "brains" to determine proper control surface deflections.

"The new electronics control system provides for greater flexibility in pilot handling of high-speed planes," said Price, "as well as allowing for better and more perfect control." Even with installation of a simplified manual flight control system as an emergency back-up to the electrical system, this control system would be lighter than a mechanical control system of equal capability.

Convair SD engineers were considering the possibility of an electric flight control system as early as 1956, although work at that time was confined to analysis and computer simulation evaluation. Development of actual hardware came later. In 1957 the Air Force commissioned Convair SD to develop an emergency back-up system for an electrical system as a safety measure. Under this contract a "minimal manual" flight control system was evolved which was evaluated in flight tests at Edwards AFB and, later, at Wright-Patterson AFB, Dayton, Ohio.

"The minimal manual flight control system, with its side-located control stick, met with the general acceptance of those who flew it," commented Price.

Dynamics test lab engineers are testing the system on the F-102 "iron horse" control system test stand in Bldg. 72 at SD Plant 1. This facility is coupled through electrical cables to the analog computer where airplane dynamics are simulated. Information from the computer lab in the form of data on rate of climb, speed, degree of turn, pitch, or roll appears on the pilot's instrument panel in Bldg. 72. Pilot interpretation of these instruments and of a simulated artificial horizon leads to inputs to the experimental control system, thus closing the loop for a realistic flight simulation.

SD experimental department is now installing the new-type system in an F-102A for flight test evaluation later this year at Edwards AFB.

Convair SD men most directly concerned with the project during its early development are R. A. Westerwick of dynamics; B. O. Andreasson and James Keogh, design engineers of the controls group; Max Leeds and George Anderson, electronics sub-department. Dynamics test engineer is R. D. Miller under supervision of J. W. Mansfield of dynamics test laboratories. Assisting Price on the project is Paul Lawhead of the dynamics group.



NEW VERSION — Test engineer R. D. Miller of Convair SD dynamics lab tries out new side-located "electric stick" for control of planes by electricity and electronics now under evaluation in SD dynamics lab test building at Plant 1.

Vandenberg Folk Hit Cloud Nine As AF's Atlas Soars to Success

On the morning of the firing of the first Atlas missile from Vandenberg AFB (Sept. 9) no one had anything on his mind more important than the shoot, according to Bunny Ingraham, **Convairiety** news contact there.

As the hours wore on the excitement mounted and by zero hour everyone concerned was at top pitch. This included the Air Force team conducting the shoot as well as the many Convair people standing by.

Al Fahenstock, missile field test checkout technician, passed along some colorful comment picked up in the blockhouse, fallout and launch area. One individual in the blockhouse became so "unglued" in the excitement that he demanded to know: "Is the man pushing the button certified?" (We all know that a stiff test is passed before certification and without a certificate "the man pushing the button" couldn't have been there!)

In the fallout area, as the missile started to wobble slightly in the first seconds of takeoff, someone shouted: "It's wobbling. APCHE did it again!" (APCHE means Automatic Programmed Checkout Equipment and the pad area boys are inclined to blame it for any "honk.") The man next to him, maintaining a stony calm, replied: "It's nothing. You'd wobble too, with that much heat back of you."

In the blockhouse, the general comment among technicians was "Oh, what I'd give to be outside!" Don Fagan, Astro chief test conductor at Vandenberg, watching the scene from outside, unconsciously spoke aloud "Go, baby! Go!" and other spectators near him took up the chant.

As the Atlas rose from the pad a steno cried "Migosh! It's on fire! I see smoke!" (She was seeing LOX vapor, of course.)

A supervisor was overheard asking his secretary if she had mailed a certain letter. Preoccupied with the launch, she replied, "I can't remember. Anyhow, don't bother me."

SPECTACULAR PHOTO OF ATLAS ACHIEVED WITH DOUBLE FILTER

Henry S. Kierstead, former ace daily newspaper photographer and a Convair lensman since 1957, used a standard 4x5 speed graphic to take the remarkable time exposure of the Atlas that appears above.

He was about two miles away from the launch site with the camera on its tripod set for a vertical shot. As it turned out, he needed every bit of film to catch the whole arc. He used an extreme 65 mm. wide angle lens with infra-red film and a red 25A filter, plus a neutral density filter of 2. The exposure was three minutes at F 32.

Convair engineers estimated that the point at which wind-blown contrails appear as clouds took place about 60,000 feet.

Nighttime exposures such as this are commonplace now, but this is a first for daytime.

53 109

Well Done! Keep it up! Says Hill as Production 880 Nears Flight

Convair moved toward a new milestone this week with the first production Convair 880 scheduled for delivery to Trans World Airlines, Inc., next month.



A. E. Hill

The airplane, No. 5, was rolled out of Bldg. 3 at SD Plant 1 the first of this month and H. G Rote, final assembly superintendent, turned the plane over to S. J. Barinka, 880 superintendent, for field operations late last week.

"Striving to achieve perfection, and stay on schedule, this has been a trying time for all departments concerned," A. E. Hill, Plant 1 works manager, said. "Considering the pressures and the time element, you have done a remarkably fine job."

Hill declined to single out any section or department for specific praise.

"This is truly a team accomplishment. Without the willingness, sincere cooperation, and hard work of every single person, from engineering right down the line, hitting our scheduled dates would have been impossible.

"One of our big goals is in sight—delivering the first production ship that will be the first jet transport to carry Convair's name over the country's airways. I have seen no evidence of let-up in enthusiasm or team effort and I am sure there will be none.

"From a cost standpoint, we are in an extremely competitive business—more so than at any other time. Great strides have been made with everyone pitching in with their cost-saving ideas. We need more — many more — and I am confident that our people will continue to turn in their cost-cutting ideas to help us operate even more efficiently."

Hill went on to say that the next TWA plane, No. 6, will be rolled out of the final assembly building within a few days, also right on schedule.

The Plant 1 assembly line is packed full of the huge 880s with planes Nos. 7, 8, and 9, together with No. 6, in final assembly; 10, 11, 12, and 13 in major mate. Four planes are in various stages of primary mate and Nos. 18 and 19 in wing mate. Wings for two more, 20 and 21, are in the bucks.

One wing buck now is being reworked to accommodate the first wings of the Convair 600, sister ship to the 880. They will go to the Scotchweld oven and into wing mate in January. The first 600 will be put on the line in between two 880s and from then on the larger airliner will alternate with the basic transports.

In conclusion, Hill re-emphasized, "We foresee an excellent and successful continuation of our transport program, made possible only by the cooperation and ingenuity of every person connected with it. With this spirit we cannot fail!"

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

San Diego EDITION

(Serving San Diego Division of Convair)

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Vol. 12, No. 21 Wednesday, October 14, 1959

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



ACTIVE SPOT—Field operations at SD is busy place and due to get busier. In foreground is 880 No. 3, due to fly soon to Edwards AFB for more testing. At right near Bldg. 3 is TWA 880, first production plane. Also visible are three Model 440s which are being modified. Only one 440 now remains unsold. Photo was taken last week from tail stand of 880 No. 4.

Capital Airlines Purchase Boosts Jet Orders to 85

Purchase of seven 880-M jet transports by Capital Airlines was announced this week by Earl D. Johnson, president of General Dynamics Corporation, and Gen. David H. Baker, president of Capital.

The 880-M is a custom-designed version of the world's fastest jet airliner, built by Convair at San Diego.

The purchase brings to 85 the number of 880/600 aircraft on order. Purchasing airlines hold options for 34 more.

First of the new aircraft will be delivered in October of next year and will enter scheduled service in late 1960.

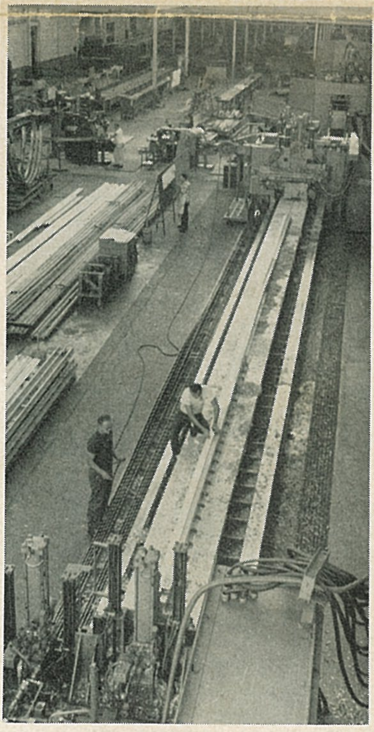
Convair's 880-M is a variation of the basic 615-mph 880 which, over nine months of flight testing, has met or exceeded every performance prediction, President Jack Naish of Convair said. Capital's planes will be specifically adapted to the line's requirements for a jet aircraft that will make possible seat-mile costs over the shorter routes even lower than the lowest seat-mile costs of competing turbo-jet and turbo-prop planes.

Four General Electric CJ-805-3B jet engines with thrust reversers and noise suppressors will power the 880-Ms. Compared with earlier engines, they will produce four per cent more thrust on two per cent less fuel.

Like the longer range 880, the 880-M will be able to carry 88 first class passengers in luxurious two-abreast seating, or 110 in all-coach arrangement. It has been specially tailored to requirements of short runway, short trip, fast turn-around operations. Leading edge wing slats and a larger vertical fin with power-booster rudder, will provide exceptional short field capacity.

Capital's announcement followed a release from Swissair Transport Co. Ltd. and Scandinavian Airlines System Inc., regarding the purchase of seven 600 jets to be called "Convair 600 Coronados." This replaces an earlier order for five intercontinental 880s.

Naish said that a Swissair-SAS analysis had shown that the Convair 600 "better meets the requirements of their route cities than the 880."



FIRST CUT—Robert Taylor and James Denton, spar mill operators at Convair SD, guide machining of first keel longeron for Convair 600.

First of 600's Longerons Cut

Initial cuts on the first Convair 600 keel longeron were made early this month on Convair SD's huge Onsrud spar mill in Bldg. 1 at SD Plant 1.

Eight cuts will be made on each of the seven 600 longerons received as first delivery from Alcoa, said H. B. Wilson, Dept. 115 foreman.

The 600 extrusions, over 15 feet longer than longerons used on the Convair 880, still don't take the entire capacity of SD's 105-foot spar mill.

After machining the keel longerons, base of the Convair 600 transport, they will be stored until they go to sub-assembly in December. The longeron will become a part of the underwing canoe in B. T. McMicken's Dept. 136 function in Bldg. 2.

New Dept. at SD To Concentrate On Electronics

A new electronics departmental organization has been set up in San Diego Division to facilitate further orderly expansion in the electronics field.

B. F. Coggan, SD Division manager, said the new department will be identified as "Convair San Diego Electronics."

R. E. Honer, formerly assistant chief engineer for electronics, has been named manager, reporting to W. W. Fox, chief engineer.

Under Honer, the electronics department functions will be headed by W. E. L. Boyce, project management; E. C. Oertel, engineering; E. W. Carlson, manufacturing; W. R. Rauth, customer requirements; and W. S. Stroud, administration.

Coggan said the decision to continue to move aggressively into the electronics field was based on San Diego's years of successful experience in the development and production of airborne and ground-based radar, special ground test equipment, data handling instrumentation, and other electronics products.

This change in the electronics organizational structure, Coggan said, is another step in recognition of the growth and importance of electronics in the aircraft and missile industry.

SD Electronics currently has 730 employees working in 300,000 square feet of manufacturing, engineering, research and office space in Plant 1.

880 Bound For Edwards For Takeoffs, Landings

Second Convair 880 jet transport in the flight test program is scheduled to fly to Edwards AFB this week for extensive takeoff and landing tests.

During the next three weeks John Knebel, captain of plane No. 3, Warner Lowe, flight test engineer, and their flight crew will put the giant white and gold transport through its paces to determine optimum takeoff and landing performance.

"Tests will establish optimum configuration and pilot technique for takeoffs and landings at maximum gross weights," explained G. E. Putness, chief of SD engineering flight test.

The 880 is being flown to Edwards AFB for utilization of Air Force facilities during tests. The Askania camera installation in which two cameras are located at fixed stations along the runway is of special value in obtaining correct data correlating time, distance and height of plane during takeoff and landing tests.

After plane No. 3 completes the first portion of the Edwards testing program, it will return to Convair SD for Federal Aviation Agency conformity inspection. It will then be flown back to the Mojave Desert base for a several-week period for FAA certification of the takeoff-landing portion of the 880's flight test program.

Plane No. 1 will continue in flight tests for stability and control system development for the next few weeks while plane No. 4 is going to field operations for a month's modification. Latest 880 changes will be incorporated into the plane and the anti-icing instrumentation installed.

Plane No. 4, third 880 in the flight test program and second 880 to cross a state line (first was No. 3 enroute to Las Vegas) flew to Yuma, Ariz., last month seeking hot weather.

In a check-out of cabin air conditioning system the plane spent several hours on the ground soaking up over 100-degree F. heat at the Marine Corps Auxiliary Air Station. Air conditioning

(Continued on Page 2)

Cost Reduction Honor Roll

Installed during the last two weeks:



Paul E. Hoover's (Dept. 4) CIP will save $37,572 a year.



Emmett Capossere's (Dept. 6) ES will save $4,170 a year.

Blood Credit Upped By 103-Pint Donation

Convair San Diego's blood credit at the San Diego Blood Bank was boosted to the right side of the ledger by 103 pints donated at the Sept. 24 bloodmobile visit.

Ken Wulfemeyer of SD employee services said that response of engineering, experimental, and tooling people in Bldgs. 5 and 51 at Plant 1 supplied enough blood to take care of current demand.

Second-shifters at Plant 2 will have a chance to do their share at the next bloodmobile visit Oct. 22. Donors may sign this week with their supervisors. The bloodmobile will be in Bldg. 3 at Plant 2 from 5 to 9 p.m.

Tafe and Smith Get New Posts

Harvey C. Tafe, veteran Convair executive, has been named director of foreign sales-military for Convair, and Kenneth M. Smith has been appointed director of military relations with responsibility for future product areas.

Smith formerly was manager of long range planning for Pomona Division. He is succeeded in that post by Lawrence E. Spear, formerly in charge of engineering programming and planning at Pomona.

In other appointments announced by T. G. Lanphier Jr., Convair vice president and assistant to the president, Clifford E. Laechelin of the Convair Washington office has been assigned full time to foreign military sales with headquarters in Washington, and Charles W. Tuck, military relations representative at Convair SD, has been named European military sales representative with headquarters in Geneva, Switzerland.

Tafe has been with Convair 19


H. C. Tafe


K. M. Smith

years. During that time he has held posts as director of flight operations, director of service, manager of the Convair Washington office for 10 years, 1944-54, and assistant director of contracts.

Laechelin joined Convair Fort Worth in engineering in 1948 and served as senior field engineer and technical representative. Tuck came to Convair San Diego engineering department three years ago after his retirement from the U. S. Navy as lieutenant commander.

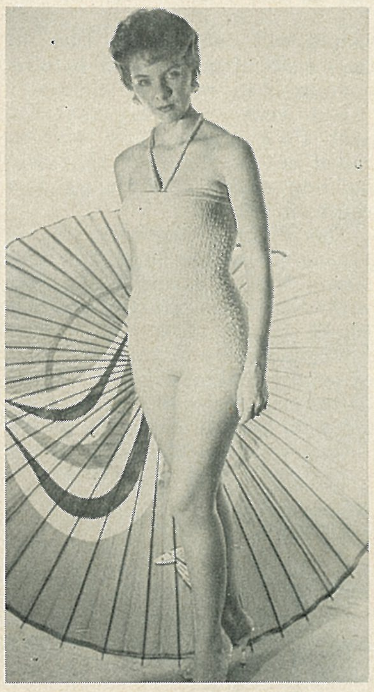
Smith had been assistant to the director of military sales and contracts for Navy in General Offices for two years; was chief of field operations and flight test at Convair-Pomona from 1952 to 1954; representative in the Convair Washington office for one year and served 2½ years with Convair Fort Worth as field service engineer assigned to the B-36 and XC-99 programs at Kelly Air Force Base, San Antonio, Tex., and Fairchild Air Force Base, Spokane, Wash.

DR. RICHARD LINNELL HEADS IAS SECTION

Dr. Richard D. Linnell, a staff scientist with Convair's scientific research laboratory, has been installed as chairman of the San Diego Section, Institute of the Aeronautical Sciences.

Installation, which also included several other Convair officers, came at an Oct. 3 dinner at the Lafayette Hotel.

Other Convair men include: James E. Fink (Convair SD), treasurer; Donald P. Germeraad (Convair SD), national council nominee; and R. C. Sebold, Convair vice president-engineering, an executive advisory management committee member. Maj. R. H. Fleet, founder of Consolidated Aircraft, was made honorary member of the management committee.



BEAUTY—Mary Bedford, wife of Ernest Bedford (Palmdale Dept. 321-2) is one of 25 finalists in "Miss Photogenic" contest at Los Angeles County Fair in Pomona. Mrs. Bedford has two children.

Reserve Officers Meet For Training At SD Naval Center

Naval Reserve officers in the San Diego area may be interested in participating in regular Naval Reserve Officers School 11-2 which meets at the Reserve Training Center each Thursday.

Courses available include missiles, Naval intelligence, industrial relations, public relations, strategy and tactics and other professional subjects.

Convair men involved as administrators or instructors include: J. F. Aspell, E. H. Curriden, R. A. Evans, W. W. Stiers, E. W. Thurston, all Astronautics, and C. R. Decker, W. C. Gieseke, R. D. Stolklosa, SD Division.

Medical Institute Meets in San Diego

Convair San Diego nurses were among industrial medical personnel from San Diego plants attending sessions of the Industrial Nurses Institute Oct. 6 in Balboa Park.

Sponsored by the San Diego County Tuberculosis and Health Association industrial committee, of which Frances Collier, SD head nurse, is a member, the Institute presented a luncheon program and repeat dinner session pointed especially for industrial health workers.

Mrs. Collier, as chairman of the dinner, introduced speakers at the evening session, while Margaret Gailey, Convair SD nurse, was luncheon chairman.

SD CLUB MEMBERS TO HEAR EHRICKE

Krafft Ehricke, director of the Centaur project at Convair Astronautics, will address the Convair SD Management Club at a dinner meeting tonight (Oct. 14) in the El Cortez Caribbean Room.

The "Science Night," sponsored by the engineering and experimental departments, will start with a 5:30 p.m. social hour followed by dinner. Also, on display at the meeting, will be large-scale models of missiles and space vehicles.

World-Wide Weapon Meet To Test 102s

Over two dozen Convair San Diego men are in Florida this week watching F-102As pit their operational ability against other fighter-interceptors at the seventh annual World-Wide Weapons Meet.

At Tyndall AFB, Fla., during the next 10 days (Oct. 14-23) for William Tell II are Convair SD military relations representatives, engineers, interceptor service personnel, field service representatives, public relations delegate, and Convair pilots.

They are R. L. Johnson and L. J. Gabor of military relations; O. W. Harper, chief interceptor service, Rod Fowle and S. B. Stevens, both of Dept. 15-5; A. C. Welti, SD public relations; Dwight Dennett, aerodynamics engineer; Don Hill, electronics; P. A. Carlson, F-102 project engineer; W. A. Pickens, group engineer, armament; F. D. Applegate, F-102/F-106 project engineer; D. C. Worden, F-106 project engineer; L. E. Ottem, senior project engineer, F-102/F-106; M. C. Terry, Holloman facility manager; R. W. Streed, Model 8 project office representative at Holloman; Howard Auten and Don Humphries, Convair pilots at Holloman AFB.

Convair field service engineers from participating squadrons are C. J. Harrell, 482nd FIS, Seymour Johnson, N.C.; B. J. Bernhardt, 326th FIS, Richards-Gebaur, Mo.; N. K. Akins, 16th FIS, Naha Air Base, Okinawa; J. E. Dodge, 525th FIS, Bitburg, Germany; W. E. Sweat, 317th FIS, Elmendorf, Alaska.

At the Panama City, Fla., location to support F-106Bs are field service representatives, G. H. Perry from San Diego; J. W. McCulloch, Palmdale facility; and Carl Taylor from McGuire AFB, N. J. Two F-106Bs are on hand from Andrews AFB, near Washington, D.C., and Geiger AFB, Spokane, Wash., for display and demonstration flights. They will not take part in the gunnery competition.

Each of the six F-102A teams will fly six missions in realistic combat conditions. Falcon missiles will be fired at remote-controlled Firebee jet drone aircraft to demonstrate defensive firepower.

Ground controllers will pick up "unknown" aircraft on radar scopes as the drone targets are flown by remote control across the missile range. F-102A pilots will be scored on their accuracy in intercepting "attacking" aircraft in least possible time. All scoring is electronically computed with the most modern air defense equipment, including SAGE data link, in use during the combat operation.

880 Goes to Edwards For Takeoffs, Landings

(Continued from Page 1)

brought interior temperatures down within the comfortable range, reported flight test engineers.

Community noise level tests were conducted with the same plane in late September at Miramar Air Station for the New York Port Authority. Takeoffs and level flights at varying power were made at altitudes of 600 and 1,500 feet to measure exterior noise from the 880's jet engines. Preliminary results indicate overall noise performance will meet requirements for Idlewild, La Guardia, and Newark Airports, all under New York Port Authority jurisdiction.

'Flight Engineering' Course Offered

Registration is still open for a course on "Flight Engineering" at San Diego Junior College. The course prepares students for license exams.

It is held Tuesdays and Thursdays, from 6:30 to 9:30 p.m., at the college, 14th and Russ Blvd. For more information call L. W. Turner, ext. 491, Plant 1.



600 GROUNDWORK—Six training officials from American Airlines inspect interior mockup of Convair 600 at Convair SD during consultation on first 600 training. Seated, from left, are A. J. Franzolino, R. L. Schrantz, R. H. Marcotte (kneeling). Standing (left to right), W. M. Galloway, A. J. Lynch, R. W. Bragg.

American Airlines Executives Confer at SD on 600 Training

First contingent of American Airlines training executives was at the Convair San Diego plant this month to lay the groundwork for first training courses on the Convair 600.

Here to evaluate Convair SD's training facilities and proposed training program was A. J. Franzolino, staff manager of training and development for American Airlines, and members of his staff, all from Tulsa, Okla.

Included in the group, besides Franzolino, were W. M. Galloway, R. L. Schrantz, A. J. Lynch, R. W. Bragg, and R. H. Marcotte.

Customer service training courses on the Convair 600 are scheduled tentatively to start next spring, said L. J. Bordelon, chief of Convair SD transport service.

American Airlines has 25 Convair 600s on order with an option on an additional 25. First delivery is slated for mid-1961.

Mail Delivery Will Be Speeded If Writers Use SD Mail Zones

Do you want your mail delivered promptly? Then be sure mail zone numbers are on every piece of mail sent through the Convair San Diego post offices.

Importance of correct zone numbers being included in return addresses of mail going out of the plant is stressed by R. I. Morse, manager of Convair SD office services.

Less than a tenth of the mail coming into the SD plant from outside parties carries zone numbers, delaying mail delivery several hours or perhaps a day, pointed out J. E. McCann, assistant mail supervisor.

"Your mail zone is your house and street number at Convair," McCann emphasized, "and assures you of receiving it at once. Any communication carrying a zone number can not get lost.

"We are gratified that practically all in-plant mail now carries zone numbers, speeding our mail delivery so that mail can be handled twice as fast as before," he added.

With over 40,000 pieces of mail passing through the Plant 1 post office each day, in addition to the quantity of internal mail going through the engineering mail room, there is little time for tracking incomplete addresses. All mail with zone numbers is handled first.

According to M. C. Tombler, in charge of engineering mail room, six or seven hours a day is devoted solely to tracing owners of incomplete addresses. To improve the situation postcard forms are being furnished all engineering personnel for informing outside correspondents of correct plant addresses, including zone numbers.

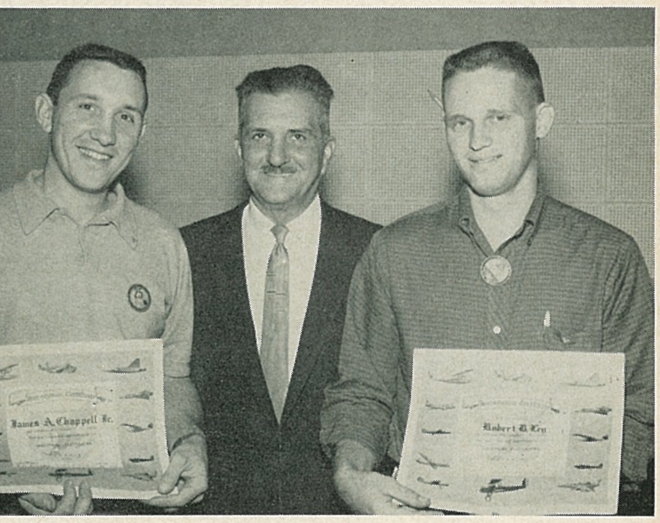
Tombler added that by automatically including zone number on every communication, mail would go through promptly.

SD Is Sending Six To Detroit Meeting

S. L. "Lee" Shipstead, Convair SD Management Club president, will head a team of club officers attending the annual National Management Association Conference in Detroit Oct. 20-23.

Slated for the conference at the Statler Hotel are speeches, workshops, and presentation of achievements awards. Shipstead will be honored at a luncheon for club presidents.

Other SD officers planning to attend: T. H. Chadwick, first vice president; C. F. McMenamy, second vice president; R. W. Dill, treasurer; B. J. Wood, recording secretary; and Doug Platt, editor, "Managair" magazine.



JOURNEYMEN NOW—James A. Chappell Jr. (at left), and Robert B. Ley receive journeymen certificates from H. A. Smith (center), Convair SD chief plant engineer, after completing four-year apprentice training. Both, now in Dept. 25, are taking advanced courses.

★ Convairiety ★

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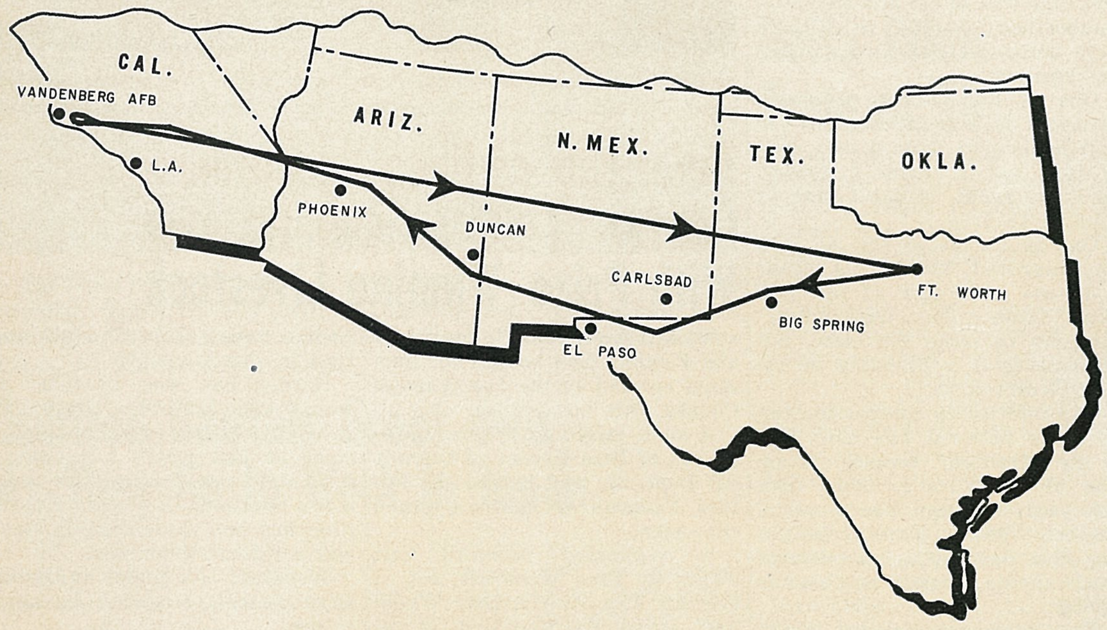
FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; Susan Bagby, Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 31, Bldg. 301B, Palmdale, ext. 337. Staff: Betty Lou Nash.



FROM 40,000 FEET—This is what Possum Kingdom Lake, near Fort Worth, looked like from returning B-58.



HERE'S THE ROUTE—This is zig-zag route B-58 followed in low-level flight to coast. On way home, at altitude, it took bee-line.

Non-Stop, Non-Refueled, Elusive B-58 'Hedge-Hops' to Coast, Returns Home

The Air Force's B-58 Hustler supersonic bomber can evade enemy defenses by flying many hundreds of miles "on the deck" —that is, at a height of less than 500 feet and at speeds of more than 700 miles an hour.

This was disclosed at Convair Fort Worth after a B-58 completed a series of dramatic on-the-deck simulated bombing missions over the Southwestern United States.

Frank W. Davis, manager of Convair Fort Worth, said the low-level demonstration proves that the twice-the-speed-of-sound bomber has enemy penetration capabilities which exceed those of any other aircraft now in existence.

He pointed out that ground radar stations cannot effectively spot low-flying planes.

B. A. Erickson, manager of flight at Convair Fort Worth and pilot of the B-58 during the series of ground-hugging missions, said a recent flight took the Hustler from Fort Worth to the Pacific Coast at less than 500 feet above the ground and at more than 700 miles an hour ground speed. The airplane returned home without landing or refueling.

The B-58 sped from Carswell Air Force Base to Edwards Air Force Base in California in one hour and 46 minutes and continued westward to the Pacific shoreline, completing a total run of more than 1,400 miles in two hours flat.

"That's faster than a bullet comes out of the muzzle of a .45 caliber pistol," Erickson commented.

Convair observers stationed on the ground at three different points along the flight path reported it virtually impossible to identify the bomber as it streaked along, even though they knew to the second when the B-58 would pass overhead.

"By the time they heard the sound of the B-58 and located the B-58 in the air, it was nearly out of sight," said Erickson.

He reported the flight smooth and comfortable despite "bumpy" air over the desert. He added that the flight did not place any unusual strain on the crew.

Due to the high speed, the "ram" air entering the Hustler's four jet engines was almost as hot as boiling water, but the crew inside was in shirt-sleeve comfort at 70 degrees because of crew compartment air conditioning.

"These tests prove once more the operating flexibility of the B-58," said Erickson, who was at the controls of the Hustler when it first flew three years ago.

The Air Force can operate—and can drop a disposable pod containing a warhead—at any altitude from low levels to more than 50,000-feet altitude.

Upon completing the cross-country penetration mission "on the deck," the B-58 climbed into the stratosphere and returned to Fort Worth. Total time for the round trip was four hours and three minutes.

A Convair F-106 supersonic interceptor helped to coordinate the B-58's low-level pass through the Edwards AFB area.

In addition to Erickson, other crew members were J. A. Rogerson, systems engineer; and Al Mitchell, test engineer.

Movie Crews Had Their Troubles Filming 'On-Deck' Hustler Flight

Rattlesnakes and communications difficulties plagued Convair Fort Worth ground movie crews as they filmed the recent "on-the-deck" B-58 Hustler flight from selected spots on the Fort Worth to California flight path.

But they came up with 11 minutes and 16 seconds of color movies to be delivered to the Air Force as part of the contract.

Photographers were stationed at Carswell AFB, Possum Kingdom Lake, Guadalupe Pass and Salt Flat, Texas. George Chyka, Dept. 6-6, had been stationed at Pismo Beach, Calif., but visibility prohibited the Hustler passing there. Perry King, motion picture department supervisor at FW, was behind the B-58 part of the way, in a chase plane.

Jack Smith, Jerry Ratliff and Bob Bruce, all Dept. 6-6, and Jimmy Hicks, Dept. 17-2, caught the takeoff at Carswell. Frank Funk and John Taylor, Dept. 6-6, were at Possum Kingdom and grabbed 10 seconds of film as the Hustler whizzed past. At Guadalupe were Nick Mertes, Bill Watson, and Warren Jaynes, Dept. 6-6, while Shields Mitchell was the photographer at Salt Flat.

Because of the B-58's speed (it kept up with its own sound), photographers had to know the exact time of arrival or they would never see it coming soon enough to get pictures. The only way was to keep in touch with flight operations at Fort Worth.

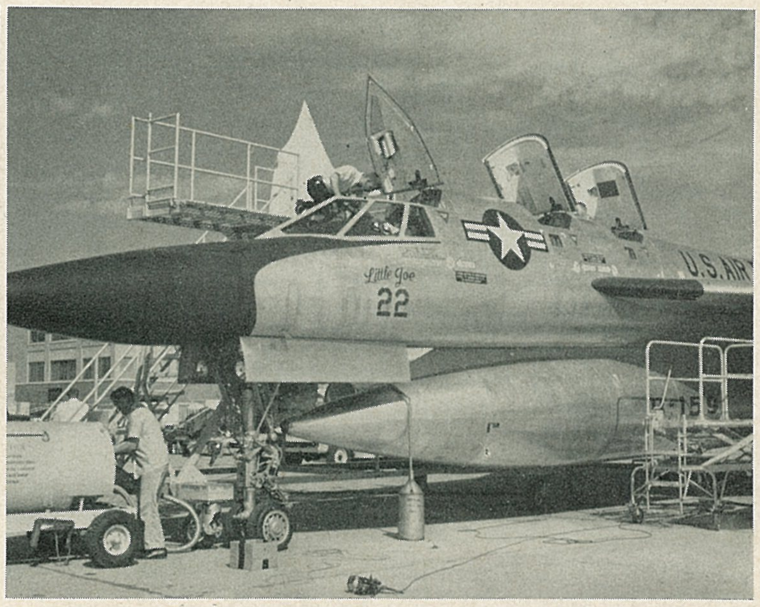
This was tough at Possum Kingdom, where the telephone was two miles away, but tougher at Guadalupe, where there were no commercial phone lines at all. Solution came from C. L. Perkins, executive vice president of the El Paso Natural Gas Co., who gave permission to tap into a private company phone line.

The Federal Aviation Agency, along with El Paso Natural Gas, set up communications for the Salt Flat camera station.

Jaynes, at Guadalupe, had a close call when he found himself standing alongside a rattlesnake. He "froze" and eventually the snake wriggled away and was later killed.



"Are you sure he was wearing shoes when he came in?"



"LITTLE JOE"—Cross-country B-58 got this name from No. 22 on its side. It's crapshooter term for pair of deuces.



IN WAIT—John Taylor and Frank Funk, FW cameramen, wait for low-flying Hustler to appear over Possum Kingdom Lake en route to coast.

Orientation on 880 Presented For TWA Management Group

An executive-type orientation on the Convair 880 was held for the first time this month for officials of Trans World Airlines, due to receive its first 880 jet transport next month.

A group of 14 TWA management personnel, headed by R. M. Dunn, TWA vice president technical services, spent the first week in October at Convair SD for the course.

Field service instructors presented material dealing with all 880 systems and structure. Engineering personnel were on hand to discuss design concept of related systems during the program developed by L. J. Bordelon, chief of transport service, with the assistance of B. J. Simons of the 880 project office. Coordinating instruction sessions was Don Maxion, regional field representative.

Final TWA training program to be held at the Convair SD plant is now in process for a dozen instructors from Kansas City, Mo. The four-week course deals with aircraft structures and systems. Convair SD field representatives, Henry Bohmbach and Ed Buckman, are leaving soon for TWA's headquarters at Kansas City where they are assigned to support the 880s going to the airline.

Other customer service training activities at Convair SD have seen 60 delegates from Delta Airlines complete the first six-week training program. A team of Convair San Diego field service representatives are scheduled to conduct the second Delta training course at Atlanta, Ga., next month.

Four to Speak At Institute

Four Convair men will be key speakers at a Middle Management Institute in San Diego which started Oct. 9 and will be held Fridays and Saturdays until Dec. 5 in the Lafayette Hotel Terrace Room.

Robert F. Smith, assistant to the vice president—administration, and B. F. Coggan, SD Division manager, are scheduled for sessions Oct. 23. Smith will discuss "Group Leadership." Coggan's subject is "Managers in a Social Situation."

"Long Range Planning" will be the topic of Dr. Neil W. Lamb, project administrator, at a 9 a.m. session Oct. 24. Millard S. Lachman, management and engineering training supervisor, will head a workshop on employee development Nov. 20.

Purpose of the institute is to provide advanced education in management and leadership principles. The program is presented by UCLA, in cooperation with civic, military, and industrial organizations, including Convair.

Is It News? Call Convairiety



EXECUTIVE BRIEFING—Above, TWA executives gather around model of Convair 880 in customer service training classroom at Convair SD during intensive orientation on 880. Third from right is L. J. Bordelon, chief of SD transport service, who organized course especially for officials.



JUMPERS — Melba Brown (SD Dept. 25) and Wesley Waits (SD Dept. 160) keep feet on ground for this picture. They are members of San Diego Sky Divers, parachute from planes for the sport of it.

Sky Diver

Convair Girl Parachutist Leaps for Fun

A Convair SD woman takes an important step almost every weekend. The step is not forward, however, it's down, straight down, sometimes a mile down.

Melba Brown (Dept. 95) takes her important step out of an airplane, right into the sky. She is one of only two feminine members of the San Diego Sky Divers Club.

"Parachuting can be a sport, the same as water skiing, tennis or golf," Melba asserts. "We are not a bunch of daredevils. Proper precautions and training, coupled with expert guidance, make parachuting no more dangerous than any other form of athletics."

The record of the club during the past six months of full-scale activity backs up her claim. There has not been one accident more serious than a bruised knee or strained muscle.

Melba and her husband, Vernon, got in on the sky floor, so to speak, when the club was formed at San Diego about a year ago. An article appearing in a popular men's magazine by a sport parachuting expert, Jacques Estelle, kindled the interest of the Browns.

The local club was formed when more than 30 answered a newspaper advertisement.

Membership in the club now is around 20. Advocates range from ex-Army parachuters to others who were "just curious." Another Convair SD member is Wesley Waits (Dept. 160).

A safety program is set up that meets all the requirements of the Parachuting Society of America. Members must complete a prescribed training course that includes jumps off a platform, parachute rigging, static jumps (in which the ripcord is pulled automatically), canopy manipulation and correct falling posture.

Club members utilize facilities at Gillespie Airport in El Cajon and parachute into a wide open, fairly level area around Santee. The more expert in the group jump from more than 10,000 feet and practice spot landings. Some hope to compete with the Russians during the next Olympic games.

"I'm no expert by any means," Melba hastens to add. "I was more curious than anything. The sensation of floating to earth is hard to describe."

Temple Will Attend Chicago Conference

F. R. Temple, Convair Fort Worth chief safety engineer, will participate in the Oct. 19-23 congress of the National Safety Council in Chicago.

As chairman of the nominating committee for the aeronautical industries section, Temple will present the slate of nominees for office.

Push Broom Sprouts In California Sun

Everything grows in Southern California — even brooms!

Ken Pauley of Dept. 31 at Convair SD discovered grass sprouting from an ordinary two-foot push broom after it had been out in the bright sunshine over a recent weekend. The broom, used to swamp out the hydrostatic test tank at the seaplane ramp where Convair 880 fuselage tests are under way, performs in ideal growing conditions — moist and warm. At last reports, the green blades were up two inches and still thriving.

F-106 Shivers In 65 Deg. Cold At Eglin AFB

Man-made ice and snow coated a Convair F-106A at shivery temperatures which reached 65 degrees below in cold weather tests recently completed at Eglin AFB, Fla.

The Convair-built jet interceptor spent two months in Eglin's Climatic laboratory, from the middle of July to September, to test operation of aircraft systems and Hughes radar system and armament, GAR-3 missiles and a MB-1 rocket.

Although testing was primarily for check-out of aircraft and equipment for operational suitability in cold weather, temperatures ranged from minus 65 degrees F. to 130 degrees above, said L. G. Atkinson, Convair SD senior design engineer of avionics and armament group, who acted as Convair coordinator.

"The F-106A performed within specifications," said Atkinson upon his return. "Although we do not yet have final analysis of the tests, indications are that the plane and equipment proved out satisfactorily."

Rain, snow, and ice was created within the climatic hangar with a dry cold or wet cold condition achieved by raising or lowering humidity. Test crews were in the hangar with the plane, operating its systems during actual tests.

Ground support equipment, including electric carts and air conditioning, was placed alongside the F-106 to experience the same conditions.

Other Convair SD men at Eglin during the two-month test period were Richard Hathaway and R. P. Castle, senior design engineers of mechanisms group; William Tatum, instrumentation engineer; and Fred Robb, field service representative.

First F-106A to go through its paces in all kinds of weather early this year completed climatic tests which took it to Eglin AFB; Wright Air Development Center at Dayton, Ohio; and Alaska in a joint Convair-Hughes test task.



FROST BITTEN—F-106A and crew huddle in man-made snow made during climatic tests at Eglin AFB, Fla. Kneeling from left are L. G. Atkinson, Convair SD, coordinator; H. L. Wright, WADC crew chief; Lt. J. R. Lacy, WADC project engineer; A. A. Merola of Hughes. In second row are W. C. Edenfield, Hughes; H. D. Clark, WADC; J. J. Woolf, Hughes; J. W. Bodey, WADC; D. D. Wagner, Hughes; H. Z. DuVall, Hughes; J. V. Karches. In third row, F. R. Tittle, WADC; J. R. Hoobler, WADC; E. N. Larson, American Electronics Industries; and in back row (left to right), C. P. Coombs, WADC; S. F. Kulikowski, WADC; C. E. Nelson, Hughes.

Collection of Old Time Weapons Includes Revolving Barrel Rifle

People at Convair Fort Worth are "gunning" without malice for J. H. Gaunce, guard in industrial security.

Gaunce, whose hobby is collecting guns, says his friends at the plant are always helping him look out for antique weapons.

He began his collection before he came to Convair — and that was 18 years ago. Most of his guns have their origins in Texas and carry with them historical backgrounds.

A .38 Colt that once killed a man and was thrown in the Rio Grande river, where it stayed for years, is an example of the past of Gaunce's guns.

Rejuvenation often is a problem. One was so old and stiff that Gaunce had to soak it in oil three days before he could even budge the hammer.

One of the Convair veteran's favorites is a pearl handled .45 Colt he bought from a man who in turn got it from a federal narcotics agent. It dates back at least to 1871.

On the handle of the .45 is a tiny engraved "two." This means it is one of a pair of identical guns. Gaunce has tried unsuccessfully to trace the mate, but he believes it is probably in the Fort Worth area.

"An interesting comparison can be made between two Colt .45s in my collection," Gaunce claims. One of the guns is more than 100 years old and has a serial number "984." Gaunce bought the other recently as his personal weapon. Its serial number is 229691.

Two rifles are included in the collection. One is a rarity—a pin fire .44 Winchester with a revolving barrel. The other is a 10 gauge Winchester, 1876 model.

Gaunce occasionally exhibits his collection at gun shows. At a recent showing which included thousands of guns, Gaunce was the only exhibitor of a rifle with a revolving barrel.

One of the smallest is a cap and ball pistol over 100 years old. It is still in good shape, according to Gaunce.

"I haven't fired the pistol, though," the Convair guard reveals. "Just don't like to fire a weapon that's over 100 years old, no matter what kind of shape it's in."



LOW MAN BUYS—Antique "bar" gun is part of collection owned by J. H. Gaunce, above, Convair Fort Worth guard in industrial security. Gun was used in contests and low score bought drinks—hence gun's nickname.

Hydraulic Article Awarded $100 Prize

A technical article written by August Lermer, operational support design engineer at Convair SD, has been awarded a $100 prize by Applied Hydraulics and Pneumatics magazine.

Submitted through the Convair Writing Award Program, Lermer's paper was entitled "The Influence of Elevated Temperatures on the Operational Performance of Hydraulic Flight Control Systems."

Convair Youths Score at Fair With Prize-Winning Livestock

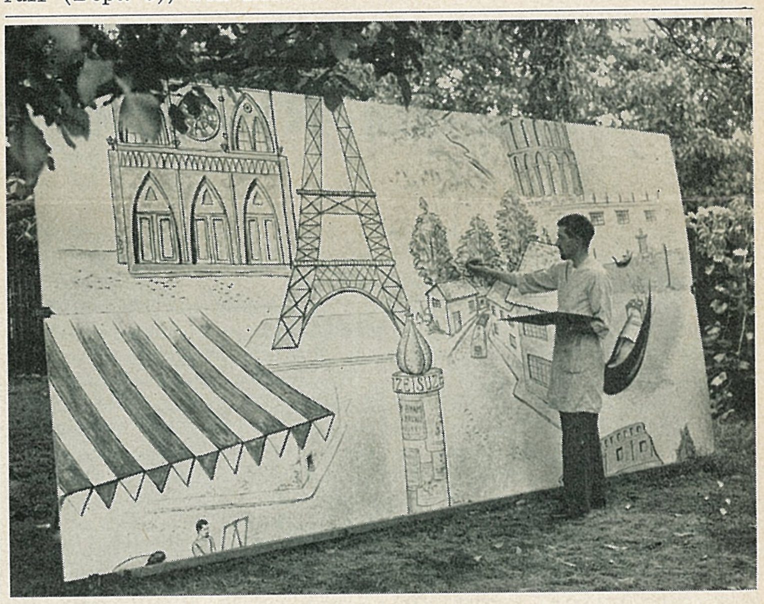
Youths from Convair San Diego and Pomona won honors for livestock entered in the Los Angeles County Fair last month.

A steer raised by Wayne Herder, son of Ivan Herder of Convair SD Dept. 21, was judged the Future Farmers of America grand champion.

A registered hereford calf owned by Fred Woodruff, son of Convair Pomona's Arthur Woodruff (Dept. 6), won first in the "senior breeding beef" class and first in showmanship.

Herder has won previous awards with his sheep, hogs and cattle. He had a grand champion steer at last year's LA County Fair at Pomona and at this summer's Southern California Exposition had one championship steer and a reserve champion.

Woodruff is a junior at Covina High School, majoring in agriculture.



VERSATILE—Pomona's James Marthai is equally at home in many art media. Here he paints section of 16 by 40-foot mural for trailer convention in Palm Springs.

Talented Pomona Artist's Mural Will Be Shown at Trailer Rally

"Jack of many trades and master of quite a few" in the field of fine arts is a fairly accurate description of Convair Pomona's James L. "Jim" Marthai (Dept. 6).

Marthai ranks as a professional. He worked for a number of years as a design draftsman, then attended Los Angeles Art Institute and Los Angeles Art Center School, and joined Convair Pomona approximately eight years ago as an illustrator in engineering publications. At present he is a publications editor in this section.

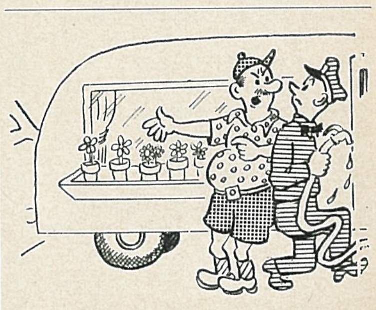
In addition, he has sold numerous paintings, drawings and pieces of sculpture. His latest commission is a huge mural, 16 feet high and 40 feet wide, which will be used at the annual Palm Springs rally of trailer owners Oct. 23-25.

The mural depicts the highlights of an European tour, the Eiffel Tower, Tower of Pisa, Rome's Colosseum, etc. It was painted in 20 sections, each four feet high and eight feet wide. To paint the mural Marthai built an easel which would hold four sections at one time.

Marthai apparently does not favor any particular medium. He does sculpture in wood, stone and plaster; he paints with all types of materials, although he has temporarily given up oil painting because it requires too much time; he occasionally works with ceramics — notably decanters, vases and ash trays; and he does sketches in ink and pencil. In fact, there are few media he has not tried at one time or another.

"I try to make the best possible use of my spare time, and I am always ready to try something new or different," Marthai explained. "This makes life much more interesting."

Marthai also writes poetry, and hopes to publish a book of verses in the near future. He is also a student of philosophy. He believes that everyone has talent of one kind or another, and that everyone should discover his special talent, and develop it.



"Let's not forget the flowers, Bud."



FLYING OVER FUJI—Model 440s got hearty reception in Japan recently. Below, SD test pilots R. T. LeVine and L. C. Brandvig pose with Japanese pilots and maintenance men. Third from left is Ernie Silver, Air Carrier Service Corp.

Spirited Banzais Greet 440s As They Go to Work in Japan

Two Convair-Liner 440s, noses liberally dipped in champagne, this month went into service with the All Nippon Airways, Tokyo, Japan.

Convair SD production flight test pilots L. C. Brandvig and R. T. LeVine have been flying Japanese dignitaries, including the Emperor's brother and family, over and around Mt. Fujiyama, Japan's highest peak, in introductory flights after delivering the Convair-built airliners to the Japanese line.

Officials of the airline welcomed the transports enthusiastically, reported LeVine, who with Brandvig will remain in Japan another month to train Japanese pilots. "All Nippon Airways officials say that the 440 is much better than the pictures show," he writes. "The newspapers were full of the news of our arrival with half-page spreads in the Metropolitan (Tokyo daily)."

As the 440s completed Japanese Civil Aeronautical Board tests they were officially turned over to All Nippon Airways in a traditional "good luck" ceremony with robed priests presiding at altars laden with fruits and vegetables set up beside the nose of the planes. Champagne was sprinkled on the 440s as officials exchanged wishes of happiness and good health.

Besides the introductory flights, which gave rides to 500 Japanese dignitaries, Convair SD pilots chauffeured 48 poets over Mt. Fujiyama in the moonlight to provide literary inspiration.

LeVine said that the Japanese airline had shown "tremendous initiative" in preparing for their first 440s. They had even constructed a flight deck cockpit procedures trainer from pictures and illustrations to give their pilots a "feel" of the Convair-Liner before they had ever seen one.

Ferrying the planes to Tokyo in August were two SD flight crews: Brandvig; LeVine; K. H. Brooker, flight engineer; and V. V. Thomason, radio operator and navigator, in one, and U. S. Johnson, pilot; P. M. Prophett, co-pilot; H. Siegenfield, flight engineer; and H. L. Anderson of Palmdale facility as radio operator-navigator, on the other. J. E. Northrup, of Convair SD is assigned to the Japanese airline as field service representative.

A two-week ground school was conducted by Brooker and ten Japanese pilots will be checked out by Pilots Brandvig and LeVine. Planes were to enter actual route service the middle of October.

As the largest plane ever to be delivered to a Japanese airline, the 440s proved outsize for the Airways hangars. Holes had to be cut in the doors to get the tails in.

In commenting upon their experiences, LeVine writes that the real hazard to flying in Japan is the taxi rides to and from the airport. "It is like a jalopy race with jalopies whizzing in both directions."

For Pete's Sake Don't Try This on Aircraft!

October's Readers Digest quotes SD Division Manager B. F. Coggan on this story, as illustrating the kind of man Convair likes to employ:

"General MacArthur summoned an Army engineer to find out if it was feasible to bridge a certain stream. The engineer declared it was.

" 'Good,' said the general. 'Have drawings made right away.'

"Three days later the general inquired how the bridge was coming along. 'It's all ready,' said the engineer. 'You can send troops across right now. That is, you can if you don't have to wait for the drawings. They ain't done yet'."

Delta Pilots Train at SD

First Delta Airline pilots are at Convair San Diego this month receiving flight training on the Convair 880. Delta Airlines will take delivery of its first 880 in January.

Production flight engineer-instructors began the first of three training courses for Delta flight crews Oct. 5 in Bldg. 4's training area at Plant 1. Courses will run continuously from now until Dec. 18 for Delta personnel, said P. H. Selby, flight training supervisor.

Designed to meet specific needs of flight crews, instruction covers operation of all 880 aircraft systems, performance, and flight characteristics. All taking the flight crew familiarization will have 10 hours in the cockpit procedures trainer.

The present group, all from Atlanta, Ga., consists of six crews (captain, co-pilot, and flight engineer), two ground school instructors, and two FAA representatives from the LA regional office who will participate in certification of the 880. Heading the contingent is H. F. Hershey, Delta supervisor of technical training.

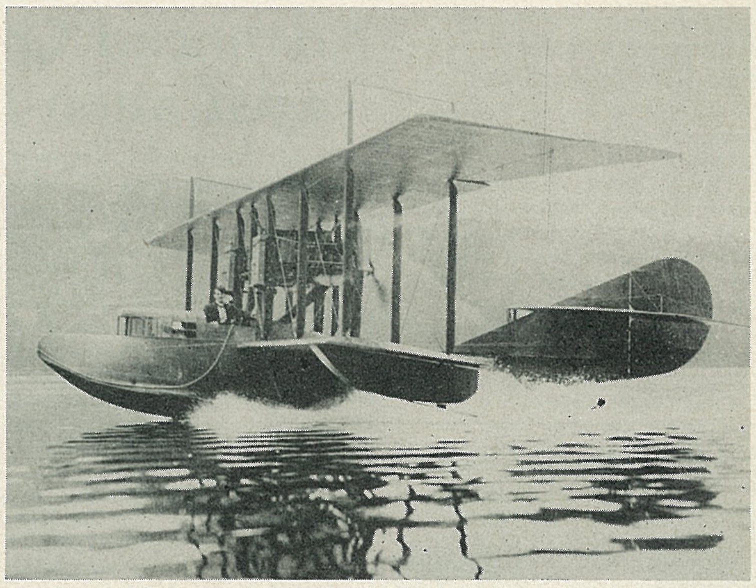
Instructing the group are K. J. Rogers, C. J. Falkenthal, C. L. Johnson, J. B. Van Houten, and L. M. Norton.

Production flight training courses ended in September for 30 TWA instructors. A group of TWA specialists was due to report at Convair SD this week for up-to-date information on latest 880 modifications.

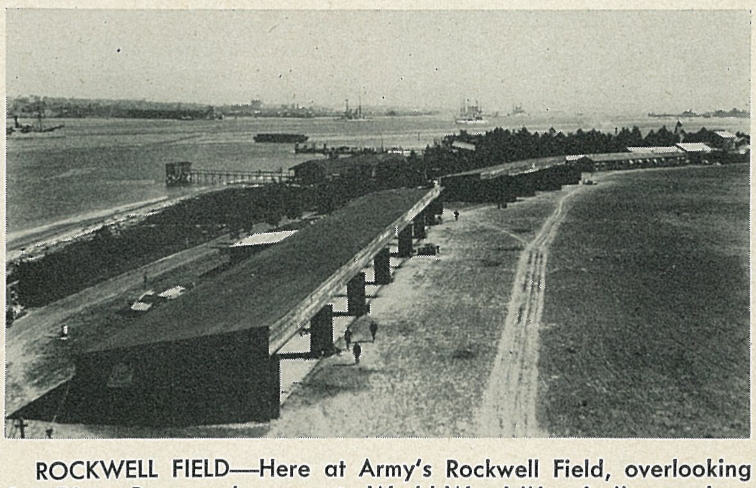
Inspection by X-Ray Paper Wins Award

A Convair SD man will receive a top award in the field of X-ray inspection at the 19th annual convention of the Society for Nondestructive Testing Nov. 4 in Chicago.

Alvin N. Hammer, quality control lab at Plant 2, has been awarded the seventh annual Coolidge Award for a manuscript on an X-ray method for inspecting F-106 missile gear legs.



THE AMERICA—Built to compete for $25,000 prize for first aerial Atlantic crossing, this was flying boat America. War prevented attempt.



ROCKWELL FIELD—Here at Army's Rockwell Field, overlooking San Diego Bay, predecessors to World War I "Jennies" were demonstrated in 1914. This photo was taken in 1917.

Model Js, Sent to Coast, Score Quick Successes

(This is installment No. 19 in Convairiety's continuing history of Convair. It involves the further activities of B. Douglas Thomas, designer, who later played an important role with Thomas-Morse Aircraft Corp., purchased by Consolidated in 1929.)

When B. Douglas Thomas arrived in the United States from England in May, 1914, he found his Model J airplane half built at Hammondsport, N. Y., and work in progress on the Model N. The latter was a modification having ailerons mounted midway between the top and bottom wings. The N also employed a new airfoil section.

During the summer of 1914 two Model Js were shipped to California where the Army's only aviation unit, the 1st Aero Corps, had a field on North Island, across San Diego Bay from San Diego. The planes, allotted Army serial numbers 29 and 30, were a success. Glenn Curtiss announced Sept. 6 that No. 30 had been timed in sustained flight at 85.7 mph, "the fastest biplane in America." On Oct. 8, Capt. H. K. Miller piloted the same machine to a U. S. altitude record of 17,441 feet.

The Army had announced a competition in June for a biplane capable of 70 mph top speed, able to climb to 4,000 feet in 10 minutes, and having four-hour endurance. Curtiss entered Model N, which arrived from Hammondsport in mid-October. While awaiting the start of official test flights, he demonstrated the plane's inherent stability by tying the between-wing ailerons to the struts, making them inoperative. The aircraft still "sped through the air at the terrific speed of 70 mph, practically unguided by the pilot," the San Diego Union reported.

The competition was cancelled for insufficient entries but demonstrations continued before an Army inspection board. A biplane entered by Glenn L. Martin scored first, reaching 4,170 feet and remaining aloft for five hours and 15 minutes. It washed out of the running Nov. 5, however, when it crashed from 70 feet during a low-speed run. (Martin was hospitalized with severe head cuts and his passenger, Capt. L. E. Goodier, suffered a broken leg.)

On Dec. 7 Raymond V. Morris, Curtiss pilot, took Model N to 4,790 feet in 10 minutes and on Dec. 16 the plane was timed at 82 mph. By then, however, it was no longer a question of how good the planes were, but only of how fast they could be built. Europe was at war.

Curtiss was in the east negotiating with the British. They looked at drawings of the JN and placed heavy orders.

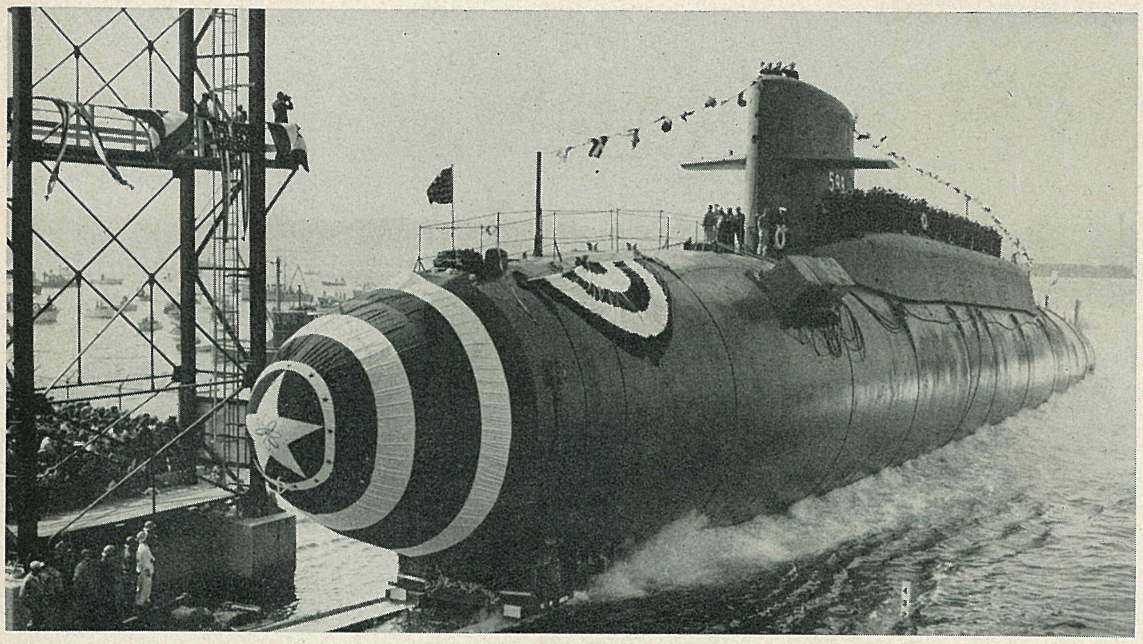
The JN-4 and JN-6 Jennies became the most heavily produced U. S. plane of the war. Curtiss and seven other manufacturers turned out more than 6,000 for the Army. Afterward the familiar yellow biplanes were long used by military and civilian flyers. The War Department grounded its last JNs Aug. 31, 1927. In 1955 the CAA still listed four in "registered, inactive status."

Soon after arriving in Hammondsport from England, Thomas was put to work designing the flying boat America, which Rodman Wanamaker was financing to compete for the London Daily Mail prize of $25,000, posted for the first aerial crossing of the Atlantic. It was to be flown by Lt. J. Cyril Porte, an invalided British Navy pilot.

The 35-foot hull had been completed in May but little else. ("Curtiss had a mania for hulls," Thomas has recalled. "There seemed to be dozens of them stored all over the place.") The English engineer carried out the design work on the wings, whose 72-foot span exceeded anything yet attempted in America, and on the tail, controls, fuel tankage and cockpit canopy.

The America was launched in late June and put through tests and modifications for two months. Thomas sometimes accompanied Porte on trial runs but judged him a mediocre pilot. "Often the landing was so rough I was afraid of being plunged through the bottom of the boat," Thomas has recalled.

When war broke out in August, Porte was recalled to duty and plans for the Wanamaker flight were abandoned. Thomas joined Curtiss on the coast, but soon returned east and went to new employment.



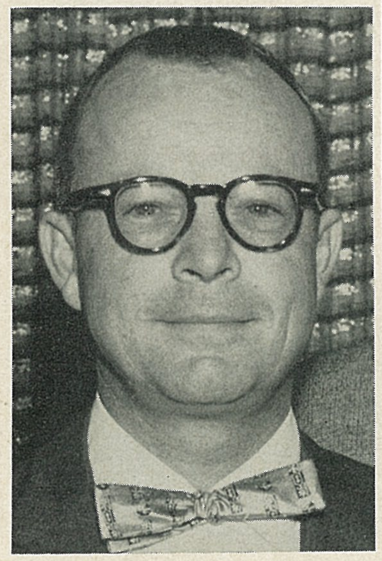
SEA-BORNE—Patrick Henry, nation's second ballistic missile-firing submarine, splashes into Thames River at Groton, Conn., home of Electric Boat. Polaris missiles can be fired from Patrick Henry while sub remains submerged.

Accompanist Sought For SD Choralaires

Wanted: a pianist to accompany the Convair SD Choralaires.

W. A. Vogel, director of the singing group, this week asked any pianist interested in accompanying the choral group to contact him at ext. 687, Plant 1, as soon as possible.

A few singers are still needed to fill out the group. Sopranos are especially in demand, Vogel added.



TWENTY-FIVE — W. R. Bruce, buying supervisor, wears emblem signifying completion of 25 years service with Convair.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Oct. 1 through Oct. 15:

Twenty-year: Dept. 6-70, J. R. Graves Jr.; Dept. 31, W. R. Eade, R. B. Thompson; Dept. 192-3, N. W. Johnson; Dept. 223, W. L. Berkheimer; Dept. 400-1, G. A. Grossaint, H. M. Nelson; Dept. 401, Alois Kirsch.

Fifteen-year: Dept. 6-51, P. L. Akins, H. C. Shoffner; Dept. 15-4, R. W. Fitzgerald; Dept. 21-1, C. E. Williams; Dept. 133, Russell Avery; Dept. 146, Alton Williams; Dept. 280, G. H. Graham; Dept. 600-1, D. L. Weems; Dept. 603-7; L. E. Stokes.

Ten-year: Dept. 6, Mildred I. Huey, V. J. Langpap; Dept. 25-3, Mabel V. Bennett; Dept. 31, W. L. Harris, L. H. Lazear; Dept. 44, Nora D. Bone, Verna D. Daniels, Margaret D. Hand.

Dept. 115, Melanie G. McAdams; Dept. 116, Florence F. Dillingham; Dept. 117, M. W. Small; Dept. 129, S. H. Delgadillo; Dept. 160, Norio Takagi; Dept. 188-7, K. G. Land; Dept. 218, Jane W. Taylor; Dept. 230, Edna M. Hubbard; Dept. 403, H. M. VanZandt; Dept. 603-0, E. R. Baldwin.

Retirements

SAN DIEGO

ANDREWS—R. E., Dept. 403. Seniority date May 2, 1951, retirement effective Oct. 2, 1959.

LANGBEIN—Gladys M., Dept. 98-6. Seniority date Oct. 7, 1940, retirement effective Sept. 30, 1959.

OLSON—Gustav, Dept. 25-1. Seniority date Feb. 20, 1952, retirement effective March 25, 1959.

ROBIN—L., Dept. 109. Seniority date Sept. 29, 1950, retirement effective Oct. 2, 1959.

SCHURICHT—J. R., Dept. 223. Seniority date Aug. 4, 1953, retirement effective Oct. 2, 1959.

WESTERLIND—G. N., Dept. 603-7. Seniority date May 22, 1939, retirement effective Oct. 2, 1959.

ZOWER—E. W., Dept. 403. Seniority date Aug. 29, 1951, retirement effective Oct. 3, 1959.

Promotions

SAN DIEGO

Promotions to or within supervision effective Sept. 28:

Dept. 171, Field Operations: To asst. foreman, W. A. Anderson, J. G. Rogers.

Dept. 192-1, Manufacturing Control: To M/C asst. foreman, G. R. Bollmann.

Personals

SAN DIGEO

Please accept my sincere appreciation for the many messages and flowers sent to me during my illness.

C. A. "Chuck" Arnold, Dept. 192-1

* * *

We wish to thank our many friends at Convair, especially those in Dept. 267, for their kind donations of blood and funds, as well as cards and flowers, during the recent illness and passing of our daughter, Mrs. Marcheta Childress.

Mr. and Mrs. "Mac" McCurdy, Dept. 267

Births

SAN DIEGO

ARCHAMBAULT—Daughter, Tamara Jean, 5 lbs., 15½ oz., born Aug. 21 to Mr. and Mrs. Gerald Archambault, Dept. 406.

NELSEN—Daughter, Cynthia Jo, 8 lbs., 13 oz., born Aug. 3 to Mr. and Mrs. R. R. Nelsen, Dept. 600-2.

Deaths

SAN DIEGO

CEFALU—Nina, Dept. 600-3. Died Oct. 1. Survived by parents, Mr. and Mrs. Salvatore Cefalu; two brothers, Tony and Richard; sister, Mary Cefalu.

FAVORS—Linzo, Dept. 201. Died Sept. 26. Survived by wife, Beulah Favors.

Advanced Charm School Registration Now Open

Convair SD women are already applying for the next advanced charm school, due to open next month, said Martha Woodberry, CRA commissioner of women's activities.

Registration for the extension course will close when the limit of 25 has been reached, said Mrs. Woodberry, who reminded all SD wives, daughters, and women employees that applications will be accepted on a first-come, first-served basis.

Opening session of the advanced instruction will be Nov. 11, a week following the close of the basic charm school now being conducted each Wednesday by Edith Antelline, instructor. Cost of the extended six-week course will be $14 per person with CRA underwriting the lion's share of actual expense.

Charm instruction will be continued on a personalized basis with more individual attention for each woman, said Mrs. Antelline. Each student will receive pointers on figure correction, posture, walking, modeling technique, makeup, hair-styling, voice improvement to fit each one's particular problems. Also included will be instruction in business and social etiquette and apparel.

Classes will be held two hours, 7-9 p.m., each Wednesday evening in the House of Hospitality, Balboa Park.

Registration can be made now at employee services, both SD plants; with Bessie Cooper, ext. 100, Fordham St. location; Dorothy Kniffen Reed, ext. 2239, Rose Canyon.

Entry Field Large For Plane Contest

A free flight gas model airplane contest next Sunday (Oct. 18), sponsored by the CRA Aeromodelers, is expected to be the largest event of its type staged in San Diego this year.

Spectators are invited to attend the competition which will last from 8 a.m. to 1 p.m. at the Clairemont-Mesa field, 1.2 miles west of Convair Astronautics on Clairemont-Mesa Blvd.

Gary Witt, Aeromodelers spokesman, said events will be held in three classes for free flight gas models. Over 60 entries are expected, he added. The CRA group has arranged for a lunch wagon to sell snacks during the competition.

Special junior (under 16) awards will be made in addition to prizes for first through third finishes.

130 Jeeps Enter Desert Cavalcade

Members of Convair SD's Jeep Club joined with the San Diego Ridgerunners Oct. 3-4 to sponsor the annual Desert Cavalcade routed between Desert Center and the Colorado River.

A total of 130 jeepsters participated in the event, some taking as long as 13 hours to cover the 80-mile course over the rough desert terrain. Entries represented clubs from as far away as San Francisco and Arizona.

The Cavalcade was led by Art Thomas (Dept. 25). Other Convair SD club members on the trip were Danny Culvert (Dept. 406) and Tom Binder (Dept. 406).

Solo Flyer Meeting Slated This Friday

Second meeting of the reorganized Solo Flyers Club at Convair SD will be held this Friday (Oct. 16) at 7:30 p.m. at Jim's Air Service, Lindbergh Field, Vic Korski, commissioner, reported.

The club is presently attempting to increase membership among private aviation-minded folk by offering more social and educational activities. Those attending the Oct. 2 meeting have been appointed to the group's membership committee, Korski added.

CRA Discount Tickets:

The following discount tickets and items are available through employee services outlets:

DISNEYLAND — New Magic Kingdom Club membership cards good for discount prices at park box office.

MARINELAND— Discount tickets, adults $1.75; children 7 to 17 years, 50 cents.

SPACE PRIMERS — An introduction to astronautics, 10 cents each.

70 Bowlers Win Summer Keg Awards

Seventy summer bowlers at Convair SD received trophies at an awards banquet Sept. 26 at Michael's Restaurant in La Mesa, Jim Hayman and Mike Brooks, co-commissioners, reported.

Winners were scattered through fifteen leagues as follows:

Whirlaway league at Pacific Recreation: Clarice Aus, Trenie Ratliff, Leon Ratliff, George Troy, Paul Wayman.

Fabrication league at Bowlero, Mission Valley: Don Weichers, Gloria Partlow, Nick Nickolaus, Lee Suverkrubbe, Pat Carlton, Bill Carpenter.

Flight Test league at Bowlero, Mission Valley: Keith Alexander, Utah Sammons, Bob Sinnott, Jean and Hugh Reynolds, Helen and Frank Evans, Pat and Gene Deering.

Mixmasters — 700 at Pacific Recreation: Jane Kishi, Ben Hill, Jim Legg, Charles Parker, Steve Lucas, Jack Rapon.

Engineering Handicap at Victory Lanes: Ken Morefield, Joyce Thompson, Ray Thompson, Jeanne Kelly and Frank Kelly. Happy Hour league at Pacific Recreation: Louis Campos, Joe Arnieri.

Clairemont Jet League: Jim Hunt, John Shue, George Howell, Gene Williams and Jean Williams. Engineering Structures league at Bowlero, Mission Valley: Jeanne Bauer, Bob Bauer, Ellen Lull, John Lull, Jerry Harrison, Carlo Riperbelli, Nick Kourbelas.

Tech Group league at Bowlero: Dick Reiling, Beverly Reiling, Jim Caltrider, Bernie Kuchta. Twilite Trio league at Pacific Recreation: Erwin Jesse, Mary Jesse, Mike Compolongo. Mixmasters 760 at Pacific: Gloria Schneider, Vern Barghols, Dave Fletcher, Huey Hubbard, Arlie Winningham.

Swingers league at Pacific: Rick Schumaker, Ed McMorris, Raz Zwolinski. Midnighters league at Pacific: Joe Arnieri, Lee Worden, Gordon Seyler. Rocket league at Tower Bowl: Bob Selle, Lee Miller and Marion Miller. Three trophies were also awarded in the Friday Swing league at Pacific Recreation.

Choralaires Elect New Officer Slate

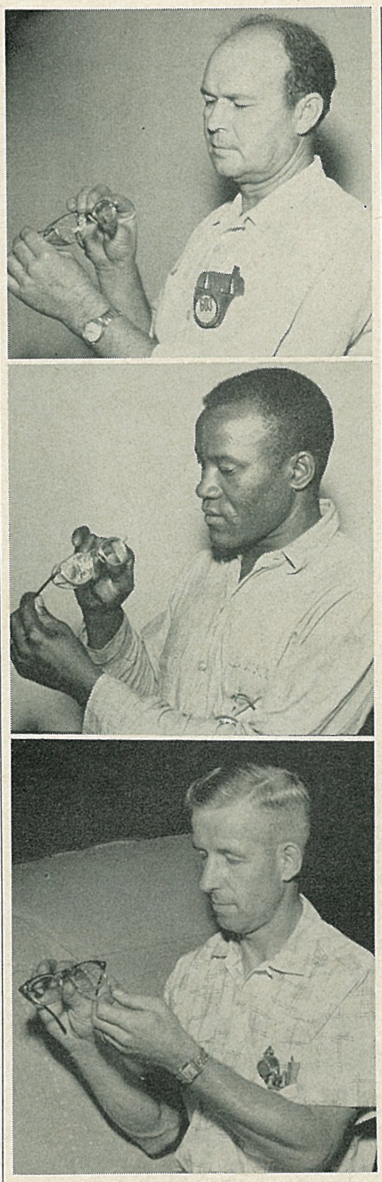
Convair SD's Choralaires last week elected a new slate of officers for the 1959-60 season, W. A. Vogel, director, reported.

Officers of the mixed chorus are: R. E. Musterait (Dept. 188), president; Genevieve Shook (Navy office), secretary; Betty Lease (Dept. 197), custodian of robes; Mary Woodard (Dept. 288), custodian of music; and E. F. Warns (Dept. 6), treasurer.

Industrial Tourney Keg Entries Taken

All Convair SD league bowlers are invited to participate in the San Diego Industrial Bowling Tournament to be held Nov. 7-8 and 15-16 at Pacific Recreation.

Mike Brooks, ext. 583, Plant 2, and Jim Hayman, ext. 1155, Plant 1, are now taking entries for the tourney. It will be a handicapped affair and mixed teams will be eligible. Entry fee is $12.50.



SAVED — Safety glasses prevented eye injuries in three cases recently at Convair SD. At top is W. H. Hodges, Dept. 603-8, center is Joseph Queen, Dept. 233, and below is A. A. Lock, Dept. 232.

Golf Club to Play Rancho Oct. 24-25

Entries are now being taken for the Oct. 24-25 Convair Golf Club tourney at Rancho Santa Fe, Gerry Dix, club vice president, announced.

He said prizes will be awarded on a total point basis (one point for a par, two for a birdie, four for an eagle, etc.). Handicaps will be used.

To place entries call Alma, ext. 218, Plant 2, or Hal Purnell, ext. 1313, Astro. Deadline is Oct. 21.

Garden Club Sets Movie at Meeting

Garden Clubbers at Convair SD will open the fall season with a meeting and film tonight (Oct. 14) at 7:30 p.m. in the Floral Association Bldg., Balboa Park.

E. L. Zimmerman, commissioner, said a film, "Modern Chrysanthemums," will be shown. There will be a drawing for door prizes and refreshments served, he added.

Is It News?
Call Convairiety

Snow Skiers Open Season

Members of Convair SD's Snow Ski Club will get together for the first time this fall on Oct. 21 at a 6:30 p.m. dinner and dance at the Rhinelander Restaurant near the La Jolla Shores Beach and Tennis Club.

New memberships are now being taken for the activity which has already scheduled an ambitious program of ski trips, fashion shows, swap sessions and skiing movies.

Reservations for the dinner and dance and general club information can be obtained by calling Joan Brennan, ext. 523, Plant 2, or AT-4-0304.

The first business meeting of the year, Nov. 3 at 7:30 p.m. in the Balboa Park House of Hospitality, will be combined with a "swap night." Joe Harris, CRA commissioner, said this meeting is a fine opportunity for beginners to purchase equipment and clothing to start the season with.

Regular meetings of the group will be held the first and third Tuesdays of the month in Room 12 of the House of Hospitality.

SD Driver Enters Top Sports Rally

Bob Dunn, Convair SD Sports Car Clubber, is co-driver of a car entered in the American International Sports Car Rally which started yesterday (Oct. 13) and ends Saturday.

He is co-driver of a Fiat sedan, one of 125 cars entered in the event which is being held at various points throughout North America. His partners are Bill Rector, driver, and George Blondin, navigator, both of Astro.

The team will cover 3,200 miles over a four-day driving grind. They started at Los Angeles and will end up at Las Vegas. However, they will take the long, long route, touching points at Twin Falls, Idaho, Denver, Colo., and Santa Fe, N. M. During one period the team will drive 22 hours without sleep.

Winner of the rally will get $2,500, with other prizes down to $50.

SWAPPING SESSION SET FOR COINEERS

Barter will be the medium of exchange at a "swap night" planned by the CRA Coin Club for Oct. 20 at 8 p.m. in the Hearing Aid Society Bldg., 3843 Herbert St.

Joe Miller, club president, said the session will be a good opportunity for both beginners and old-timers to fill vacant slots in their coin folders. Main emphasis will be on cents, nickels and dimes.

A coin auction will follow the swapping. For more information call Miller, ext. 2067, Plant 1. He also reminded club members and others interested that some of the best collections in the area will be on display at the San Diego Coinarama Oct. 18 in the Lafayette Hotel Terrace Room.



ON DISPLAY—Atlas missile and jet 880 got together recently at air show at Miramar Air Station near San Diego.

Reiter First In SD Match Golf Tourney

Al Reiter (Dept. 115) notched another major victory on the Convair SD golf circuit last month, winning the championship flight of the annual match play tourney.

The victory was the second major win for Reiter in the past four months. During the summer he won the Convair SD and Astronautics golf championship.

Scores soared at the championships Sept. 12, 19 and 26 at the Flying Hills course. Extra-hole playoffs were common as golfers had trouble dropping putts on temporary greens, Ken Wulfemeyer, commissioner, reported.

In the championship class Reiter carved out a 77, good enough to trip runner-up Danny Ramirez (Dept. 146) four and three. Ramirez finished with an 82.

Wulfemeyer said 96 golfers entered the competition, filling out 11 flights. Winners and runners-up were:

First flight, R. Gregorich (Dept. 292), Jim Johnston (Dept. 3); second flight, Fred Wells (Dept. 3), Ray Minutello (Dept. 6); third, John Mellett (Dept. 15), Frank Applegate (Dept. 6-53); fourth, Walter Bore (Dept. 292), George Hasti (Dept. 180); Fifth, Jim Lawton (Dept. 6), E. Tate (Dept. 292); sixth, Tony Meziere (Dept. 288-5), Sam Graves (Dept. 600); seventh, Bob Shannon (Dept. 180), G. G. Nunez (Dept. 31); eighth, William Severson (Dept. 600), Lee Snyder (Dept. 600); ninth, Wayne Turner (Dept. 3), Claude Repine (Dept. 188); 10th, R. A. Cooley (Dept. 600), Jim Watt (Dept. 15); 11th, Chuck Klebert (Dept. 6) and John Treband (Dept. 6).

New Members Join Toastmistress Club

Two new members were welcomed by the Delta Toastmistress Club, Convair women's group, at the Oct. 13 meeting.

Jeanne Constande of SD-Dept. 6-35 and Roxanne Miller (SD-Dept. 1-65) were inducted by Martha Woodberry, membership chairman, in a ceremony held at the home of Lee Betts (wife of L. T. Betts, Dept. 4).

Presiding was Virginia Reynolds (Astro-325-2). General evaluator was Gertrude Maddow (SD-6-32); topicmistress, Marge West (SD-6-35); and Frieda La Frenere (SD-6-70), lexicologist and grammarian.

Special guests included Fran Leland (AF office), chairman of Council No. 7, International Toastmistress Clubs, Inc.

Convair women interested may contact Martha Woodberry, ext. 1245. Guests are cordially invited.

New Team Selected By SD Pistol Club

A new Pistol Club team, based on high standings in national match events, has been chosen to represent the CRA club for the next three months.

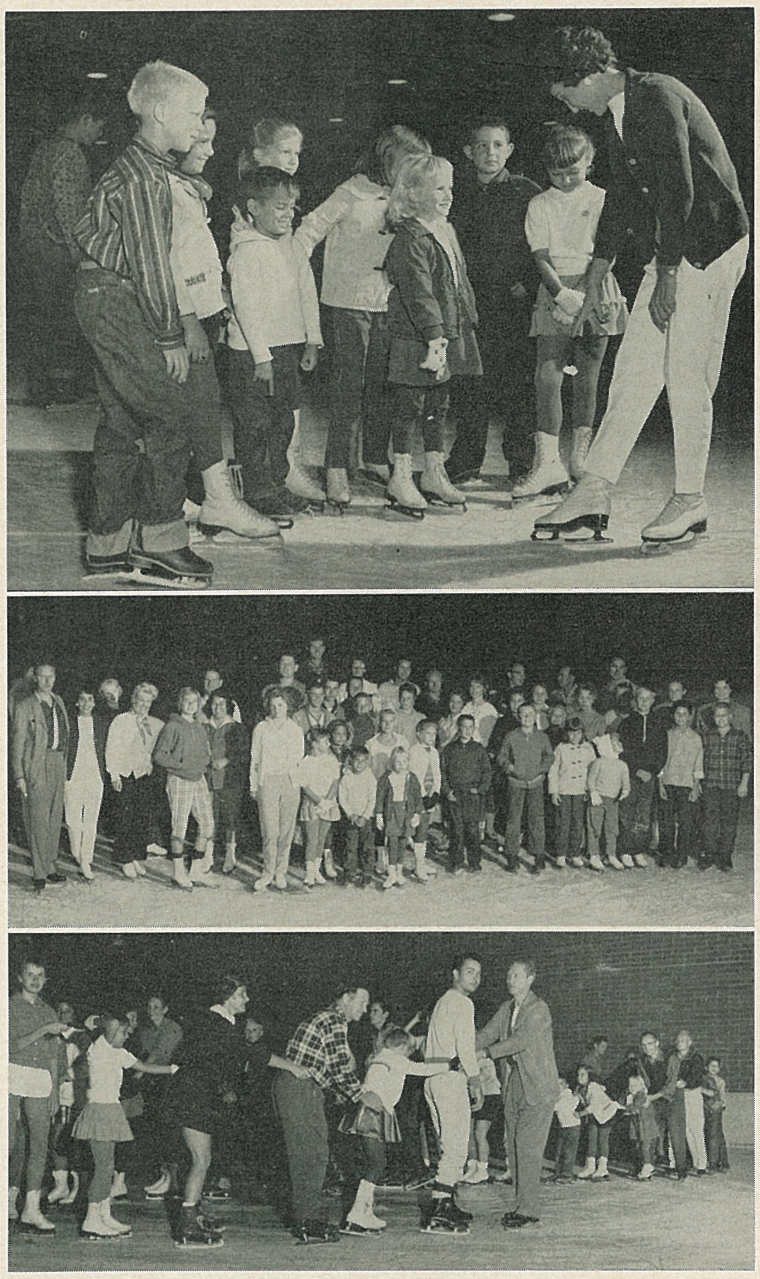
Members are B. L. Broadway (Dept. 603), Jim Halfacre (Dept. 180), Joe Williamson (Dept. 401), and Ralph Picard (Dept. 6).

Broadway edged Williamson and Halfacre by one point Sept. 27 to take first place honors in the master class. Tops in the expert class was W. G. Walker (Dept. 6). Dorcus Utter (wife of Arley Utter, Dept. 129) led the sharpshooter category.

Dinner, Dance Set For Car Clubbers

Sports Car Clubbers at Convair SD will install officers at a dinner and dance this Friday (Oct. 16) at 8 p.m. in the Sands Hotel on Clairemont Mesa Blvd.

Ballots cast two weeks ago will not be opened until the evening of the dance. Latest club winner was Barrie Freeman (Dept. 6) who took "seat of pants" honors at a rally sponsored by the Women on Wheels Club Sept. 29.



SKATING SPREE—More and more Convair SD skaters are taking advantage of special Thursday night sessions at new Iceland Rink on Lake Murray Blvd. Starting soon will be discount-priced lessons (top photo) taught by instructors at rink. Below: part of group at last week's session. Leading "snake line" is Bud Davies, CRA commissioner.

Ice Skating Lessons Now Offered by Club

Free skating lessons will be offered by the Convair SD Ice Skating Club starting tomorrow (Oct. 15) at Iceland, 6055 Lake Murray Blvd., Bud Davies, CRA commissioner, reports.

"All Convair SD folk, family members and guests are invited to attend our weekly Thursday evening sessions," Davies said. "With attendance increasing, we will now be able to offer two free classes, a beginners and an advanced."

Audrey Ericson, professional skater at Iceland, will instruct the advanced group between 6:30 and 6:45 p.m.; beginners between 6:45 and 7 p.m.

Special rates are in effect for Convair skaters between 6:30 and 7:45 p.m. every Thursday evening at Iceland: adult admission is 75¢, juniors (16 and under) 50¢, skate rentals 35¢, and 25¢ for spectators. Doors are opened to the general public after 8 p.m., however, Convair skaters can continue until 10 p.m. without additional charge.

Davies said the club will issue new membership cards during the next few weeks. Admission will be either by membership card or Convair identification card, he added.

SD Bridge Lesson Turnout Is Large

Almost forty Convair SD folk are taking advantage of a discount-priced "learn to play bridge" offer authorized by the CRA Bridge Club, Frank Westphal, club spokesman, reported.

The group is now half-through the series of 10 lessons conducted by Mrs. Gladys Hines, director of the Barcelona Hotel Bridge Club. Students get a $2.50 refund, through CRA arrangement, after completing the course which costs $10.

Next playing session of the Bridge Club will be held Tuesday (Oct. 20) at 7:30 p.m. at the Hotel Barcelona, 4th and Juniper.

Camera Club Plans Quarterly Contest

Third quarterly contest of the CRA Camera Club at Convair SD will be held in conjunction with a 7:30 p.m. meeting Oct. 26 in the Balboa Park Photo Arts Bldg., Ron Ainsworth, club spokesman, reported.

Competition will be in both black and white and color slide categories. Contest subject is landscapes and seascapes.

Ainsworth said the competition is limited to club members but added visitors are welcome to attend the session. A qualified judge will view entries.

CRA Sports & Recreation Convairiety

CRA Caps Pecan Park Program With New Three-Acre Purchase

Three additional acres of land adjacent to Pecan Park were purchased last month by the Convair Recreation Association, the last step in a land acquisition program that started in the fall of 1957.

J. K. Field, chief of employee services at Convair SD, announced the purchase last week and said that it capped long-range plans adopted more than two years ago when it was decided to purchase land for a permanent Convair recreation area.

The latest acquisition extends the Pecan Park area to the elementary school line in the southeast corner, and pushes the number of acres to 20½. Field said a house was included in the purchase of the land parcel, adding that it would be remodeled and used by the park director, Jack Brock, and his family.

The three-acre purchase is the fifth separate transaction involved in the Pecan Park program. Three land units were purchased from different owners in July of 1957. A year ago a five-acre slice was acquired.

Pecan Park is considered now as one of the finest recreational areas in San Diego county. Facilities include softball, volleyball, basketball, badminton, and shuffleboard courts; ping-pong games, horseshoe pits, washer games, special games area, kiddie playground, teen-age playground equipment and gym apparatus.

Abundant parking space is available. A dance floor, complete with music shelter, will accommodate 400 people. Other picnic conveniences include picnic tables, park benches, first-aid building, pure drinking water and 20 charcoal barbecue pits.

The park is located east of San Diego on Highway 80, near Johnstown (six miles east of El Cajon). It is closed Mondays for maintenance.

Lanphier to Head '60 Open Tourney

T. G. Lanphier Jr., Convair vice president and assistant to the president, heads the 1960 San Diego Open golf tournament Jan. 28-31 as chairman of the Sponsors Executive Committee.

Mission Valley Country Club will again be the scene of the tourney, with the pros shooting at prize money of $20,000. The four-day event will be preceded by a Pro-Amateur tournament for which a $5,000 purse has been set.

A sponsor-patron ticket selling plan will again be employed. Profits from the 1960 Open will be used exclusively to promote and encourage junior golf throughout San Diego County.

Employee services, Plants 1 and 2, will sell tickets for the event during January.

Keg Leagues Open For Second Shift

Second-shift bowlers are needed to fill two leagues at Pacific Recreation (Pacific Hwy. and Ccuts St.).

One is a Wednesday league at 11 a.m.; the other rolls Saturday mornings at 1:30. Second-shifters interested can sign up either morning at Pacific Recreation.

Elsinore Fall Soaring Contest Next Event for SD Glider Club

A quartet of glider enthusiasts from Convair SD will be among the leading competitors at the Elsinore Fall Soaring Contest Oct. 17-18 and Oct. 31-Nov. 1. Other CRA Club members will play important ground support roles.

Local entries in the cross-country distance and speed flying contest are Gene Wigham, John Williams, DeVaughn North and John Swinson. Two Dept. 6 men, Bob Baker and Walt Mooney, will direct tourney organization. Baker is chairman and Mooney chief tow pilot of the contest which is sponsored by the Associated Glider Clubs of Southern California.

CRA members will use club equipment during the meet. Sterling Starr, club spokesman, said CRA would also award a variometer (an instrument that measures intensity of magnetic forces) as a tourney prize.

Williams will be competing in the meet after posting a third place finish at a tourney last month in Antelope Valley.

Two club members recently qualified for the Silver Sea award, Starr said. Earning the international soaring honor for flying 32 or more miles and gaining 3,000 feet while staying aloft five hours were Ted Falk (Dept. 6) and Roger Williams, 15-year-old son of John Williams.

Partial requirements for the award have been completed by Bob Stokely, John Swinson and Ted Sanford.

Starr said three club members recently soloed for the first time at Torrey Pines Gliderport. They are Bill Carter, Mike Packard, 15-year-old son of Frank Packard (Rose Canyon), and Carl Stark. Two other club members about to solo are Larry Sweeting and Dick Fletcher.

The club will award four $20 incentive awards in January in the following categories: longest distance flown; highest altitude attained; most glider hours; and longest distance flown to goal.

Starr added that the barograph, radio and oxygen equipment recently purchased by the club have been in use every weekend.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

AEROMODELERS — Free flight gas contest next Sunday (Oct. 18), 8 a.m. to 1 p.m., Clairemont-Mesa field.

ARCHERY—Meeting tomorrow (Oct. 15), 7:30 p.m., Astro executive dining room.

BADMINTON—Open play for families Tuesday evenings at 7:30 in Balboa Park Federal Building.

BOWLING—Entries now open for Industrial Tourney Nov. 7-8 and 15-16 at Pacific Recreation. Contact Jim Hayman, ext. 1155, Plant 1, or Mike Brooks, ext. 583, Plant 2.

BRIDGE CLUB—Next session Oct. 20, 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CAMERA CLUB — Quarterly contest and meeting Oct. 26, 7:30 p.m., Photo Arts Bldg., Balboa Park.

CHORALAIRES — Rehearsals each Monday evening 7:30 p.m. in CRA Clubhouse on Pacific Hwy.

COIN CLUB — Coin swapping session at meeting Oct. 20, 8 p.m., in Hearing Aid Society Bldg., 3843 Herbert St.

DELTA DIVERS — Meeting Oct. 27 at 7:30 p.m. in Balboa Park Conference Bldg.

GOLF—Entries now open for Convair Golf Club tourney Oct. 24-25 at Rancho Santa Fe. Call Alma, ext. 218, Plant 2.

ICE SKATING — Convair night every Thursday. Discount rates between 6:30 and 8 p.m. at Iceland, 6055 Lake Murray Blvd.

MOVIES — Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admission: adults, 25¢; children, 15¢.

RADIO CLUB — Meeting tomorrow (Oct. 15) at 7:30 p.m. in Harbor Drive headquarters.

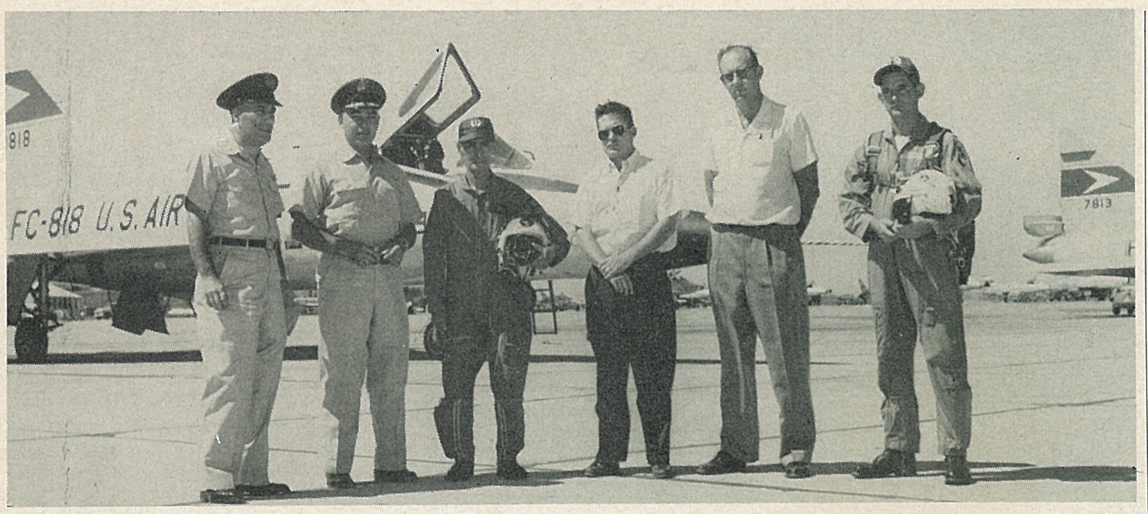
ROLLER SKATING — Skate night Monday (Oct. 19) at Skateland, Front and G Sts., 6:30-9 p.m. Free tickets from employee services, both plants, and from departmental representatives.

SNOW SKI CLUB—Activities for new season open with dinner and dance at Rhinelander Restaurant, near La Jolla Shores Beach and Tennis Club, 6:30 p.m., Oct. 21.

SOLO FLYERS—Meeting this Friday (Oct. 16) at 7:30 p.m., Jim's Air Service, Lindbergh Field.

SPORTS CAR CLUB—Installation of officers at 8 p.m. dinner and dance this Friday (Oct. 16) at Sands Hotel on Clairemont-Mesa Blvd.

WOMEN'S ACTIVITIES—Registration now open for advanced charm school.



F-102 CHECK-OUT—Convair-built F-102 interceptor was evaluated by chief of staff of Japanese Air Self-Defense Force, Gen. Minoru Genda, recently at George AFB. In shot taken after check-out are (from left) Lt. Col. Louis Grillo, 329th Squadron commander; Brig. Gen. Prescott M. Spicer, 27th Air Division commander; General Genda; James Stuart, Convair engineering test pilot; Joe Hitch, Convair technical representative; and Capt. Stillman V. Taylor, chase pilot.

New B-58 Ejection Seat Restrains Arms, Legs

An improved ejection seat design for the B-58 proved successful in recent tests at Convair Fort Worth.

The seat is chiefly distinguished by restraints which keep the crewman's arms and legs tightly in place during ejection, protected from high speed air blasts capable of breaking bones.

The seat is an interim measure, an improvement over early B-58 ejection seats, and will serve until the escape capsule system (**Convairiety, Sept. 30, 1959**) is perfected.

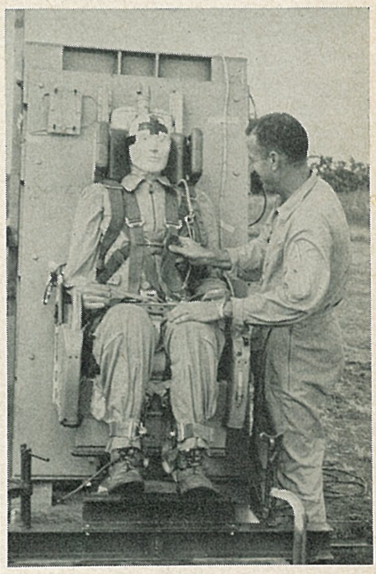
"Sierra Sam," a 200-pound test dummy, was used for the FW ground test series. Sam was shot up to a height of 135 feet and landed 208 feet away. His speed was estimated at 50 feet per second.

The "one decision" ejection system works in this sequence: the crewman pulls a trigger that sets off an explosive charge, starting the seat upward; a second charge fires a rocket motor powered by solid fuel. This added power carries the crewman safely away from the aircraft. The crewman stays with his seat until just before his parachute opens, at which time the arm and leg restraints automatically relax and the seat is jettisoned.

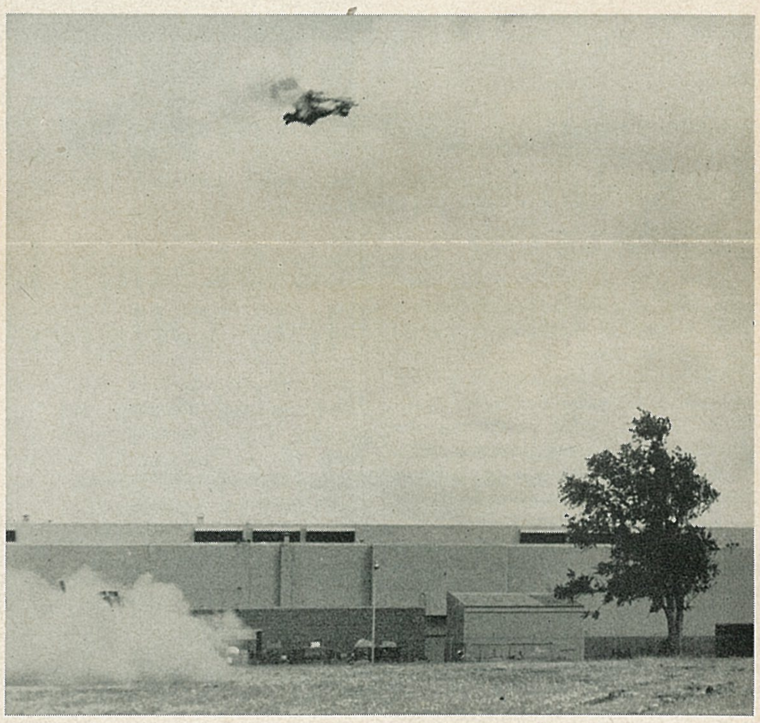
After completion of a series of tests in Fort Worth, the new ejection seat will be taken to Hurricane Mesa, Utah, for tests of the complete system.

Members of the furnishings design group which developed improvements on the seat are M. W. Martin, design group engineer; C. R. Sierra, project design engineer; and J. W. Beckwith, senior design engineer.

Working from the engineering test laboratories on current trial firings of the seat are R. C. Bissell, group engineer; J. E. Hickok, project test engineer; R. L. Roper and R. E. Allen, test engineers.



SO LONG, SAM—Jack Blackmon, FW Dept. 12, inspects "Sierra Sam" before dummy took to air in test of new ejection seat distinguished by restraints which keep arms and legs from flailing in air blast.



HIGH FLYER—Dummy was at 135 feet when this photo was taken. Note rocket blast which carries it safely up and away from aircraft in ejection process.

Second T-29 Converted to 'Platform' For Monitoring at Missile Range

Second T-29 to be converted at Convair San Diego into an airborne frequency monitoring platform was delivered to the Air Force last week.

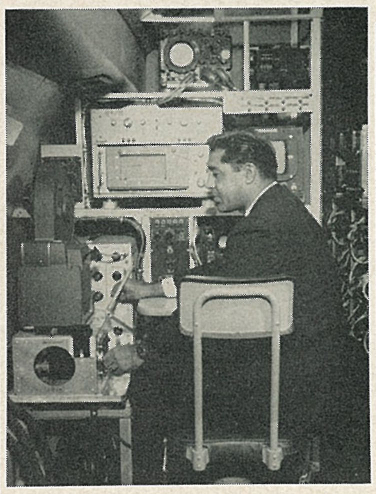
The T-29 will go into flight tests at the Air Proving Ground Center at Eglin AFB, Fla., before it is put into operation over the Eglin Gulf Missile Test Range. First modified T-29 was delivered to the Air Force in June of this year.

The two planes have been converted, under an AF contract, to airborne stations for frequency monitoring and interference control (F M I C) during missile launching and flight tests.

William Garcia, Convair SD project engineer, explained that the two modified T-29s will be used during missile tests to check out ground radar and telemetering stations, to monitor frequency interference in the test area, and to record data during launching and flight of missiles over the 400-mile range.

"The Air Force has indicated a definite need for this type of aircraft," said Garcia in pointing out that the modified T-29s are the first complete flying monitoring stations ever built.

Four clusters of seven different antennas are spotted on the exterior of the planes, on each side of the nose and on each side of the tail, for picking up signals which are recorded and reduced electronically by the maze of instrumentation packing the interior. Signals from ground stations to the missile, from the missile itself, and interference signals can be received by the plane's electronic instruments. Information received can be analyzed while airborne and command instructions transmitted to the test center.



WIRED — William Garcia, SD project engineer, at Datasync camera station in interior of modified T-29 crammed with electronic instrumentation.



COMPLETED—Second T-29 modified as airborne frequency monitoring platform awaits delivery to Air Force on Convair SD flight line. William Garcia, SD project engineer, points out cluster of antenna which will pick up signals during missile test flights at Eglin AFB, Fla.

Terrier to Arm Frigate Halsey

A new Terrier-armed guided missile frigate will be named in honor of the late Fleet Adm. William F. Halsey Jr., the Navy has announced.

The warship, designated DLG-23, is authorized under the Navy's Fiscal 1960 shipbuilding program. The Navy said construction on the new ship is scheduled to start early in December at the Naval Shipyard, San Francisco. The vessel is expected to be launched in Sept., 1961.

Guided missile frigates — the designation DLG means destroyer leader, guided missile — are a new class of warship, designed to provide speed, endurance and "seakeeping" qualities required to operate with a carrier task force. The new ships are scheduled to be armed with Convair Pomona-built Terrier missiles as well as antisubmarine warfare weapons, the Navy said.

New Bureau of Navy Weapons Replaces Two Present Agencies

The Navy's new Bureau of Naval Weapons was established Sept. 1 to eventually replace the present Bureau of Ordnance and Bureau of Aeronautics, the Navy has announced.

Both Congress and the President approved the plan to consolidate the two bureaus into a single agency. However, both will continue to function until the organizational details of the new bureau have been worked out.

Original target date for getting the Bureau of Naval Weapons into actual operation was July 1, 1960. The Navy has announced, however, that rapid progress has been made and now it is expected that the new bureau may begin operation about Jan. 1, 1960.

One of the objectives of the merger is to provide an effective organization for the development and procurement of Naval weapons and weapon systems. Another is to integrate the many phases of modern weapon systems. This will bring a unified approach to the development of weapon systems rather than two parallel approaches which, particularly in the field of missiles, have been common under the current two related bureau systems.



Convair's Astronautics Plant Stars in 'Architects of Space'

"Architects of Space," special movie featuring Convair Astronautics, its plant, its products and people, is now in the editing stages at a Hollywood studio.

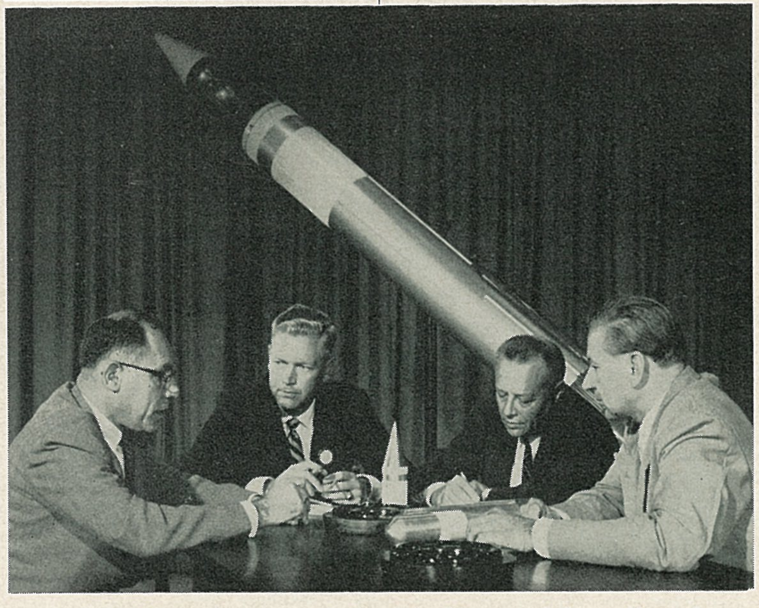
In some three or four months it will be turned over to the United States Information Agency (USIA) for distribution around the globe. Special sound dubbings will be made in at least four foreign languages as well as English.

A motion picture production crew from the Raphael G. Wolff studio in Hollywood spent a week at Astro filming scenes for the feature. From an estimated 3,000 feet of film, editors will come up with 10 to 15 minutes of finished black and white story.

Joe Lively of Astro's engineering department is featured in scenes throughout the Astro plant. However, many Astro people are shown, including top management and leaders in various space projects.

Dan Downer directed the filming for the Wolff firm, while Astro's Bill McClure, a motion picture photographer, assisted in the production work.

Present plans call for making at least one copy of the finished film available to Astronautics for showings, McClure said.



LENS ANGLE—A scene of film "Architects of Space" made recently at Astro features these top men. From left, Mort Rosenbaum, J. R. Dempsey, K. J. Bossart and Krafft Ehricke. Shot at Astro, film will be equipped with sound in five languages for distribution by United States Information Agency.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation

Convairiety

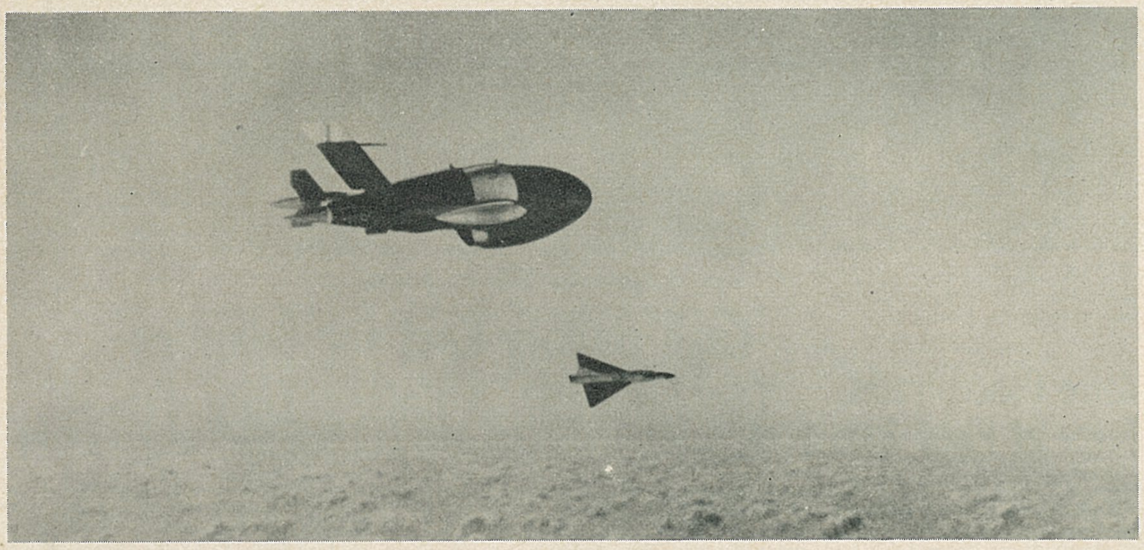
San Diego EDITION

(Serving San Diego Division of Convair)

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Vol. 12, No. 22 Wednesday, October 28, 1959

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



IN 'COMBAT'—Convair F-102 darts into air during realistic war games at Tyndall AFB, Fla., to knock out "enemy" invader, simulated by speedy Firebee drone (in foreground).

First Components Of Data System Shipped to WADC

First components of a highly-refined data handling system, designed and built at Convair SD under an Air Force contract, were delivered the middle of this month to Wright Air Development Center, Dayton, Ohio.

Rolling out of SD electronics factory in Bldg. 4, Plant 1, were two large sections of DAISY II (Data Acquisition and Interpretation System) being constructed under a more than $2 million contract awarded Convair SD the latter part of 1958.

The system will be put into use at WADC to gather and record information during high temperature structural tests of advanced aircraft and space vehicles. (DAISY II is a follow-on to the initial Convair-designed system now in operation at the high temperature structures research laboratory at the SD seaplane ramp.)

Eliminating manual handling of masses of data, the system is able to provide instantaneous information on reaction of parts to extreme temperatures and stresses during testing. Collecting information from hundreds (2,043) of pickups on test specimens at a rate of 120,000 readings a second, results, which normally would take months to process, can be recorded within 24 hours, explained Howard Stern, SD project engineer.

DAISY II is five times as large and much more complex than the first DAISY system now in use at Convair SD.

First shipment was made up of two sections (carts), about 10 feet long and 8 feet high, and two tape units which, with two consoles to be shipped the end of this month, will comprise the interim system. This unit will be put into use by December to serve as "brain" during structural tests until the complete system is delivered in October of next year. The entire, or ultimate, 2,000-channel system will consist of eight carts and three consoles. Each of the carts controls 250 channels.

Research group engineer who directed designing is Stan Rogers. Other SD design engineers working on the project are Paul Sherertz, design specialist; Robert Crabb, Richard Kuphaldt, and Carl Halonen. Stern, as project engineer, was aided by Art Zagon. In charge of electronic assembly is D. C. Newlon.

SD to Solicit Con-Trib-Club Non-Members

Con-Trib-Club at Convair SD will conduct its annual membership roundup next week (Nov. 2-6), aiming at a goal of 90 per cent participation, J. K. Field, Con-Trib-Club committee chairman, announced.

Lists of non-members are being distributed to supervision, along with tab cards carrying individual names. All that is necessary is to sign and designate the amount of deduction desired.

Roughly 5,000 non-members of the Con-Trib-Club at San Diego and facilities in Palmdale, Edwards and Holloman will be asked to join.

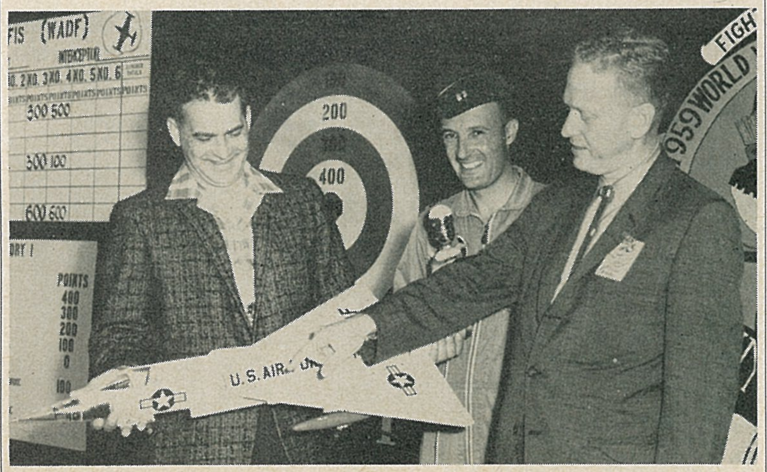
"That is the number not presently participating," Field said. "Our current membership is about 19,000 or 80 per cent, and we hope to raise this to 90 per cent."

Booklets and other materials explaining Con-Trib will be given non-members. Those signing will immediately receive their 1960 membership cards and window stickers. (New cards and stickers for present members will be distributed late in November.)

Minimum deduction is 20 cents a week for hourly employees and 40 cents a pay period for salaried. However, many give much more. A booklet, available at employee services, carries a table for "fair share" giving.

This month marks the seventh anniversary of Con-Trib-Club at

(Continued on Page 2)



BOOSTERS—D. C. Worden (right), Convair SD F-106 project engineer, and L. J. Gabor of Convair SD military relations, describe high performance of Convair F-106 during television interview with Capt. Norman Smedes, F-106 project officer for 4750th Test Squadron at Tyndall AFB, Fla.

Zooming, Hard-Hitting F-102s Repulse 'Attack'

Combating bad weather as well as actual "fighting" conditions, Convair F-102s took to the air last week to shoot down "enemy" attackers in realistic war games high over the Florida coast.

Six teams from all parts of the United States, Europe, and Pacific area manned Convair fighter-interceptors in competition at the Seventh Annual World-wide Weapons Meet Oct. 14-23 at Tyndall AFB, Fla. F-102 teams competed among themselves in attaining most perfect scores in day and night firing of Falcon missiles on Ryan Firebee drones. F-89s, F-100s, and F-104s also participated in other categories of the gunnery meet.

Top-scoring F-102 team was from 460th FIS, Portland, Ore. A perfect mission on the last day of competition pushed their score to 4,800 points. Team from 525th FIS, Bitburg, Germany, was a close second with 4,700 points.

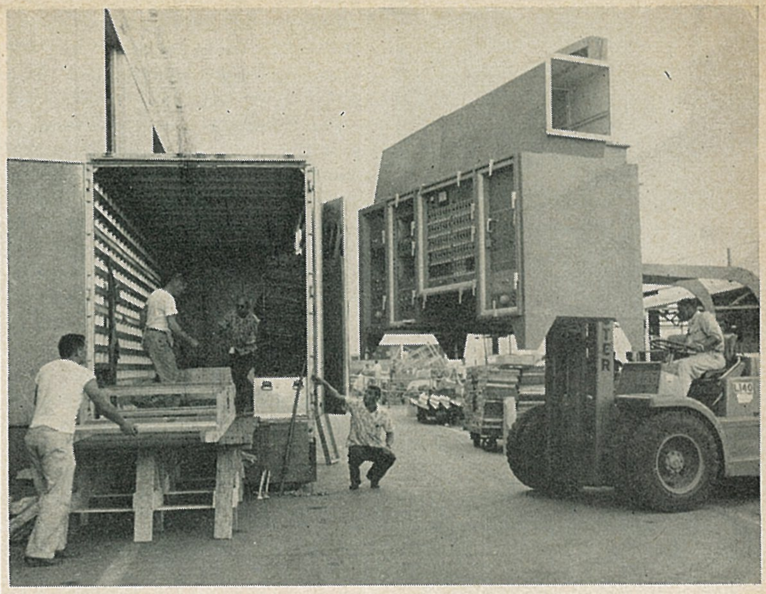
Individual high-point man was Capt. F. H. England Jr. of 460th FIS with 1,900. Second was 1st Lt. T. E. Wolters, also 460th FIS, with 1,700 points.

Capt. Frederick H. England Jr. of 460th FIS, Portland International Airport, Ore., representing Western Air Defense Force, chalked up the first perfect score of the meet, known as William Tell II. Captain England Jr.'s

(Continued on Page 2)



WARM WELCOME—Col. Y. A. Pitts Jr., F-102 team captain of 460th FIS, Portland, Ore., is greeted by Nan Dunlap, a William Tellette, during weapons meet at Tyndall AFB, Fla.



LOADING—One of first two units of huge data handling system being built at Convair SD for Air Force is lifted onto truck which transported them to Wright Air Development Center, Dayton, Ohio.

B-58 Hustler Vital to Defense, Pace Tells Audience at FW

"America can't afford to do without the B-58.

"It is our responsibility—not as General Dynamics or Convair people, but as American citizens—to provide the nation with this most potent weapon of defense."

That definitive spelling out of the duty of Convair people—for their own good and that of the nation—came from Frank Pace Jr. at the annual "Top Brass Night" meeting of Convair Fort Worth Management Club.

Pace, chairman of the board of General Dynamics, was principal speaker. Special guests were General Dynamics board members, members of the board of management, Convair President Jack Naish and Executive Vice President August C. Esenwein.

The dinner meeting, held at Ridglea Country Club, was attended by a record-breaking crowd of more than 1,600.

Pace told club members that he was particularly impressed with the B-58's various capabilities, especially after recent test missions in which the Hustler flew "on the deck" (that is, under 500 feet) for 1,400 miles in approximately two hours (**Convairiety**, Oct. 14).

"What we have accomplished in General Dynamics and Convair has been done with total integrity," said Pace. "I am proud of what has been done at Fort Worth.

"We are in a good position to continue the B-58 program because what we have promised, we have delivered or exceeded. We must continue to keep ourselves and our actions above reproach.

"We'll continue our efforts in the B-58 program not because it's ours—but because it's right."

Pace said that "when the cards are dealt at the international poker table, the winning cards are strength."

Astronautics Personnel Leaving Plant 1, Concentrate at Plant 2

Evacuation of Astronautics personnel from Bldg. 4 at Convair SD Plant 1 will move into high gear next month to make way for the manufacture of the Convair 600 jetliner.

Some 375 Astro people, plus tons of supplies, will move into a "new home" in Bldg. 3 at Plant 2. By mid-December Astro will have relinquished all but one or two small locations in Plant 1, Bldg. 4.

In addition to making room for 600 manufacture at Plant 1, the move will consolidate the massive Astro support center operations for the first time. Both maintenance and overhaul and supply functions will be located in Plant 2, Bldg. 3, affording maximum operating efficiency.

The Astro function provides direct assistance to Air Force units assigned the Atlas for test or operational purposes. This ranges from dispatching supplies and spares to complete overhaul and maintenance of missiles.

At Plant 2, Astro will utilize the entire east side of Bldg. 3, extending between Columns "A" and "C" for the full north-south length of the building. Some 210,000 square feet of space are involved.

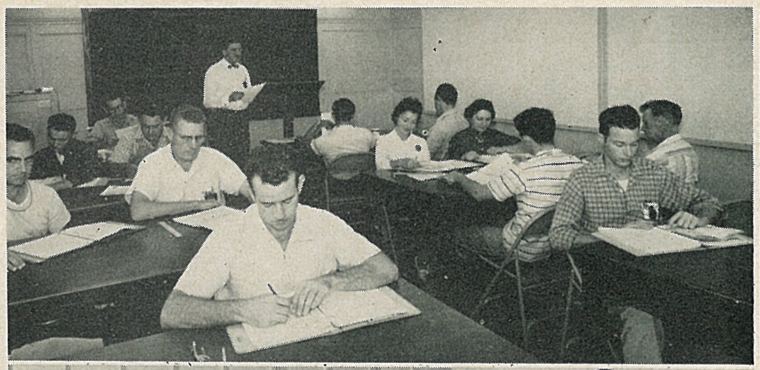
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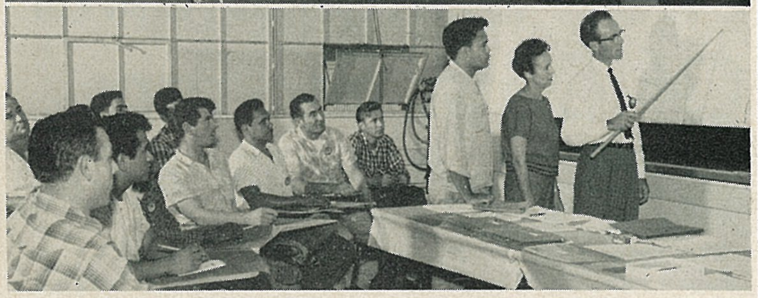
'Fisherman' Tickets At 20 Pct. Discount

Adult admissions for the 8 p.m. showing of "The Big Fisherman" Nov. 28 at the Capri Theater in San Diego are being offered Convair SD folk at a special 20 per cent discount.

"The Big Fisherman" depicts the life of Simon Peter and stars Howard Keel.

With discount, general admission seats cost $1.40, loges $1.60, as compared to regular prices of $1.75 and $2.00. Children's price is 75¢, good for any seat in the house. Tickets go on sale today (Oct. 28) at employee services, Plants 1 and 2.





HERE'S HOW—W. E. Newton, SD educational services, lower photo, explains blueprint to class of new employees in jet transport program at Convair SD. Lone woman in class is Merkel H. Duke of inspection. In upper photo William Sherman, Dept. 267, teaches second shift group, Plant 2 in-plant blueprint reading class.

Specialized Blueprint Reading Class Popular With New Hires

Helping newly-hired people at Convair SD do the best possible job in the best possible way as they enter Convair's jet transport program is the goal of a new class offered through SD educational services.

A course in fundamental blueprint reading, pinpointed for specialized work on Convair's assembly lines for the 880 and 600 transports, has a present enrollment of 28 men and one woman, all new employees. The course, instructed by W. E. Newton of SD educational services, is given during off-work hours for a period of 12 weeks, two days a week.

"This course has attracted greater interest than any course we have ever offered on employees' own time," said Newton, who explained that the program was developed in response to interest aroused during the basic familiarization course sponsored by the company for new hires.

"Convair's new employees are realizing the importance of building a good work record right from the beginning," he continued, "and they are responding wholeheartedly to the opportunity of obtaining further knowledge for their particular jobs on their own time."

The course is designed to give employees in assembly departments a thorough knowledge of the blueprints they will be using on the job. Students are from Depts. 142 through 146, wing and wing primary departments for Convair SD's jet transports.

"We are certain that training courses developed primarily for the specific work involved will result in better workmanship with a sharp reduction in wasted materials and time," said H. W. Rubottom, chief of SD educational services.

Next course will be offered after the first of the year.





WINNERS—Three MacSave-it awards (top photo) were given at October meeting of SD Management Club. Together, their CIPs saved Convair in excess of $350,000. From left: Jack W. Cox (Dept. 170), September award; George S. Hopps (Dept. 4), July; and G. M. Loudermilk (Dept. 266), August. Mug of Month honor (below) went to D. L. "Doug" Platt (Dept. 6), editor of Managair magazine.

Winner of Jewelry Sought by SD Club

Some lucky Convair SD woman is luckier than she knows.

Winner of a sparkling set of blue rhinestone and pearl jewelry at the Sept. 26 SD Management Club dance, she still didn't get all that was coming to her, said E. G. Gray, raffle chairman.

She was so pleased with the necklace and earrings that she left without claiming the third piece, a matching bracelet.

If she will contact Gray (Dept. 400), ext. 2912, Plant 1, he will be happy to turn over the missing piece to its rightful owner.

★ Convairiety ★

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Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Alyce Martin. News contacts: AFMTC, Bobbie Waddell, ext. 3038; Vandenberg AFB, Bunny Ingraham, ext. 8-3258; Warren AFB, Ernie Balbos, ext. 832.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; Susan Bagby, Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Offices, Room 103, Bldg. 301 B, Palmdale, ext. 337. Staff: Betty Lou Nash.

Alkazin on Special Sales Assignment

Joseph J. Alkazin, manager of Convair SD customer service, has been assigned to the office of J. G. Zevely, Convair vice president of commercial sales, T. J. Sullivan, SD assistant manager, announced.

The short-term assignment, under the executive development program, will be for a period of six months, effective Oct. 12. Alkazin will handle some airline accounts as well as miscellaneous duties.

O. W. Harper, chief of SD interceptor service, will assume Alkazin's duties as manager of customer service for the period. Roy E. Sommers is acting as chief of interceptor service during the same time.

Astro Concentrates Force at Plant 2

(Continued from Page 1)

Down the center of this area is a two-story mezzanine known as "B" mezz. To the east is the "B" bay and to the west the "B-C" bay, all designated by the column numbers bordering each.

Astro has utilized the "A-B" bay for over a year. Machinery and equipment for maintenance and overhaul work have been installed as they arrived. Special training units for Air Force squadrons have also been built in this area.

Renovation has been under way for some time. Additional lighting has been installed and the entire area heating system reworked and improved.

Zooming F-102s Repulse 'Attack'

(Continued from Page 1)

wing man, Capt. E. W. Chiles Jr., froze his radar on the target's wreckage to make a second direct hit as it was plunging into the Gulf of Mexico.

Col. Younger A. Pitts Jr. captained the 460th FIS team.

Torrential downpours continued into the third day of the William Tell meet, canceling scheduled flights to comply with AF safety regulations requiring "clear air" for launching jet drone targets.

Con-Trib Straggler Campaign to Begin

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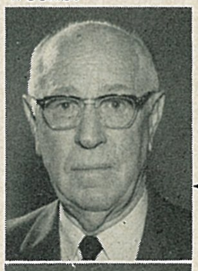
Convair SD. More than $2 million has been given to charity since its organization in 1952.

Donations have increased from $141,395.57 distributed the first year to $345,000 during the current fiscal period, ending Sept. 30.

In addition, during the past seven years, $200,000 has been given SD employees through the Emergency Aid Fund (for food, clothing, medical assistance, etc., for distressed Convair families).

Cost Reduction Honor Roll

Installed during the last two weeks:



A. H. Kimble's (Dept. 110) CIP will save $65,980 a year.



Mrs. E. C. Stuart's (Dept. 6) ES will save $4,906 a year.



BALLOTING—Sam Catalano and Gene Devlin of Convair SD Dept. 8-1 "vote" for contestants in Dept. 8 personality queen contest by dropping money in ballot boxes. Collections will go to Dept. 8 Christmas fund for needy.

Cash Ballots Cast for Beauties As SD Dept. 8 Raises Xmas Funds

Stuffing ballot boxes is approved procedure in Convair SD's industrial engineering department these days—as long as the stuffing is cash.

Dept. 8 people at Plants 1 and 2 are getting a chance to pile up their Christmas fund the painless way, by voting for their favorite beauty. Seven personable young ladies have been selected as contestants in the department's campaign to name a queen for the annual Christmas dance. Girl ending the drive with the most money contributed will win the title of "Miss Personality."

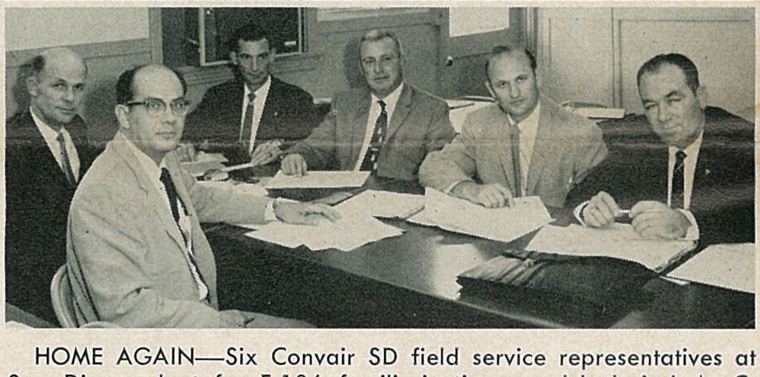
Votes are a penny each, explained Gene Devlin, chairman of the Dept. 8 activities committee. All money deposited in the boxes will go into the department's fund for needy families at Christmastime.

Girls vying for the queen title are Jerri Cooper (Dept. 8-2), Sharon Flick (8-5), Mickie Wood (8-1), Pat Roundy (8-8), Julie Fejeran (8-6), Dolores Boswell (8-8), Anna Corio (8-7).

Posters carrying pictures of each girl above her individual ballot box appeared last week in all locations where Dept. 8 people are stationed, Bldgs. 1, 5, and 33 at Plant 1 and Bldgs. 4 and 24 at Plant 2.

Queen contestants are doubling as main ticket salesmen to the Christmas dance and dinner to be held Dec. 12 at Fisherman's Hall, 640 State St.

Assisting Devlin with arrangements are Joan Brennan, Marion Palma, Mildred Weston, Sam Catalano, Dick Brumagrim, and Klaus Groeger.



HOME AGAIN—Six Convair SD field service representatives at San Diego plant for F-106 familiarization are (clockwise) A. C. Snyder, L. M. Goodloe, Hal Wilson, Stan Orton, R. L. Cormany, G. P. McElvain.

Field Service Reps. Return to SD Home Base For Two Weeks of F-106 Familiarization

Six field service representatives are back at home base in Convair San Diego now for instruction on Convair's newest fighter-interceptor, the F-106.

Called in from bases scattered throughout the United States, the regional field service engineers are receiving a two-week F-106 familiarization course at Plant 2 educational services location.

Five will return to their stations at the close of the 80-hour training course. The sixth, Hal Wilson, from 317th FIS, Elmendorf AFB, Alaska, has been assigned to Convair SD field service office.

Others are A. C. Snyder, WADC and AMC Hdqrs., Wright-Patterson AFB, Dayton, Ohio; L. M. Goodloe, 26th Air Division, Syracuse AF Station, N. Y.; Stan Orton, 32nd and 33rd Air Divisions, Goldsboro, N. C.; R. L. Cormany, Western Air Defense Force, Hamilton AFB, Calif.; and G. P. McElvain, 30th Air Division, SAGE, Truax Field, Madison, Wis. McElvain recently reported to Truax from Pepperell Field, Greenland.

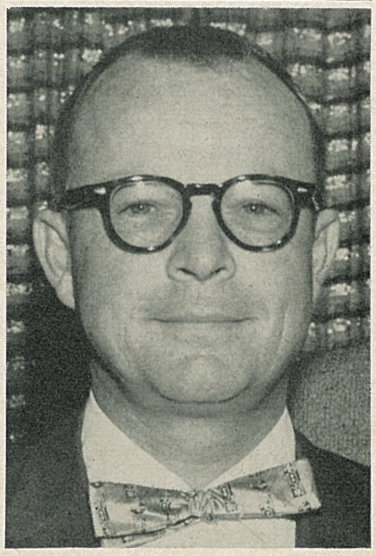
Chapter of IES For SD Planned

Convair Astronautics and San Diego Division employees have been invited to participate in an organizational program for a San Diego Chapter, Institute of Environmental Sciences.

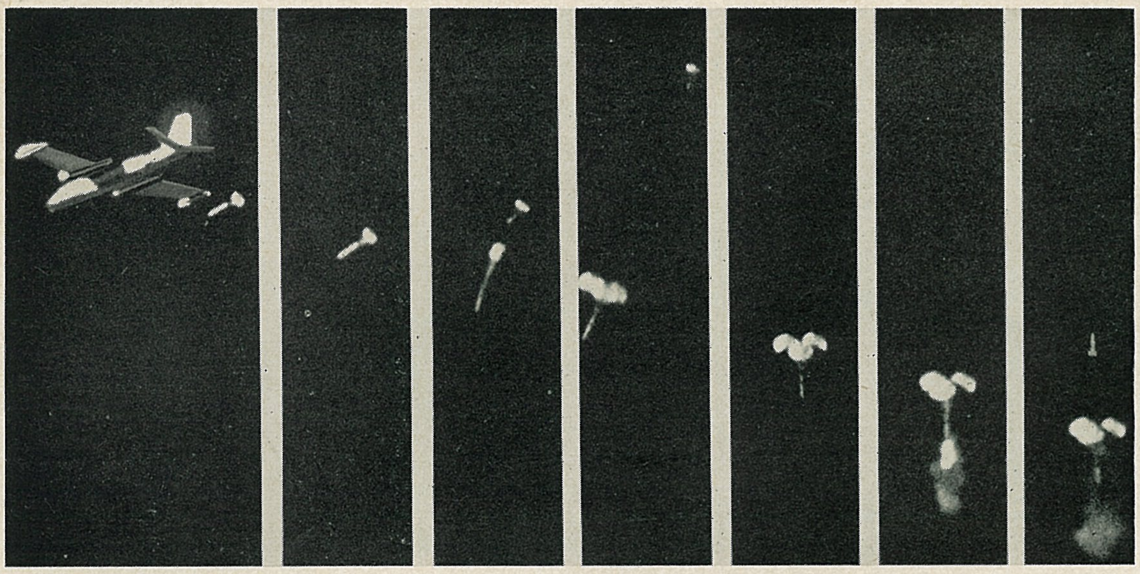
At 6:30 p.m. Nov. 4 a dinner will be held at Lafayette Hotel with Dr. Leslie W. Ball, a reliability consultant, as speaker. He will discuss "Environmental Test and Its Role in Reliability."

Los Angeles members of the IES will help answer questions.

Reservations may be made through J. E. Dorsch at ext. 2277 at Astro or D. Donahue at ext. 1813, San Diego Division.



FOR THE RECORD — W. N. Liddle, buying supervisor in SD's Dept. 34-1, received his 25-year pin recently. His photo is above. Same photo was incorrectly identified in Oct. 14 issue as that of W. R. Bruce, SD manager of material. *Convairiety's* profound apologies to both.



ON UP AND UP—Photo series shows Rocketsonde dropped from plane, parachute deployment and then ignition of rocket motor as rocket continues on upward journey.

Novel Rocket Developed at Pomona Radios Weather From 40 Miles Up

A unique rocket developed at Convair Pomona shows promise as the answer to the problem of obtaining vital high-altitude weather information over ocean and polar regions.

In successful tests the device, called the "air-launched Rocketsonde," has radioed weather data to its launching aircraft from nearly 40 miles above the earth's surface.

The rocket is less than eight feet long, and is fired from a launching tube suspended from three parachutes after being dropped from a high-flying aircraft. It was developed in a three-year program conducted by Convair Pomona for the U. S. Air Force's Air Research and Development Command.

N. E. Maxwell was project engineer for the program, and he has been assisted in the project by K. F. Bloom. Maxwell reports to W. J. Morrow, chief of advance development. M. R. Seabrook assisted with early testing of the device, and in more recent tests assistance has been given by J. H. Wilberding.

The Convair engineers worked closely with the Aerial Reconnaissance Laboratory and the Directorate of Procurement at Wright Air Development Center, Wright-Patterson Air Force Base, Ohio, in developing the new device.

Some of the testing was done at Pomona, while tests conducted from aircraft were performed at Holloman Air Force Base in New Mexico.

The Rocketsonde is carried in a reinforced plastic tube in the bomb bay of an airplane. The tube is dropped at an altitude of approximately 20,000 feet. A drag chute slows the tube, and three larger stabilization parachutes spread out in a cloverleaf pattern, leaving an open space directly above the top of the launcher tube.

In less than 20 seconds after the tube is dropped from the plane, the Rocketsonde is fired from the launcher tube straight up into the atmosphere.

Six seconds later the rocket is traveling at Mach 4, or about 2,600 miles an hour. It then coasts up to about 200,000 feet, where the instrumented nose section is released for a slow parachute descent to earth. The instruments immediately start taking temperature, pressure, humidity and ozone content readings, and relay the information back to the launching aircraft by radio. Readings are transmitted every two seconds.

The information is then relayed to weather forecasters, who keep pilots and missilemen constantly advised of high-altitude weather conditions.

Two Attend Course On Speed Movies

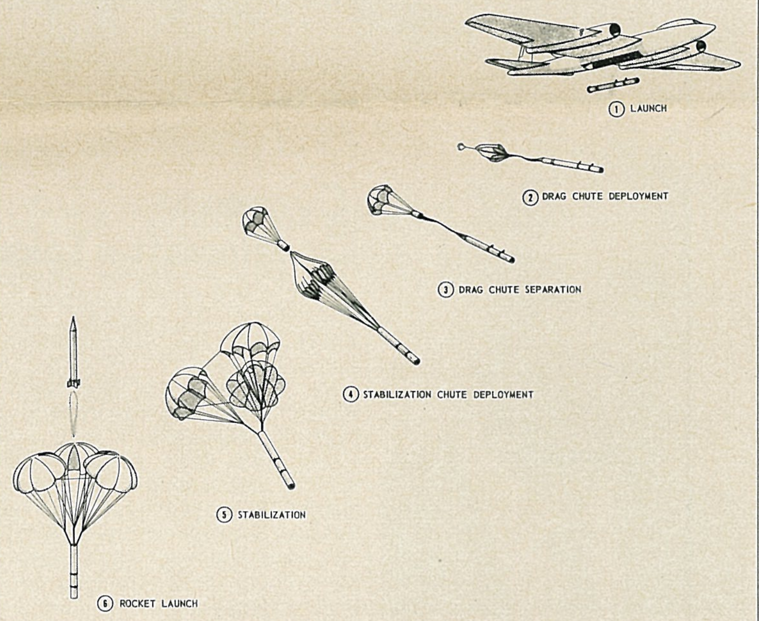
R. R. Koser, Convair SD motion picture assistant supervisor, and Jack Matthews of the SD still photo section attended a short course in high speed photography last week at the University of Wisconsin. Representatives from industrial firms throughout the United States were enrolled in the course which showed latest developments in the field of filming high speed movies.

Toothy Typewriter Greets FW Steno

A typewriter almost "bit" a Convair Fort Worth steno when she opened it to find a glistening set of false teeth!

Word got around and the owner claimed the teeth and explained that he had been drafted to do some typing in a crash situation the night before.

Best he could figure was this: he had removed his teeth and put them in his shirt pocket while he typed. When finished, he apparently bent over the typewriter and the teeth fell out unnoticed.



SEQUENCE—Sketch offers clearer story of how Rocketsonde is launched from high-flying aircraft before continuing to 40-mile altitude.

Jet 880 Hostess and Steward Procedures Discussed in Three-Day Course for TWA

Comfort of future Convair 880 passengers held the spotlight at the first 880 hostess and steward briefing held this month at Convair SD.

Ground handling of food, baggage, pillows and blankets, and hostess duties in Convair jet transports when they start carrying passengers over the country's air routes next spring, were discussed in a three-day course for TWA representatives.

Nine TWA personnel, all in charge of different facets of steward and hostess management and training, were at Plant 1 for the 24-hour course, Oct. 7-9. They were given an intensive briefing in familiarization of 880 equipment in customer service training classes under direction of R. W. Fitzgerald, instructor.

Lucille McNally and Betty Burger, first women to attend Convair 880 training classes, were included in the group from TWA headquarters at Kansas City, Mo. Miss McNally is supervisor of hostess training for TWA and Miss Burger, hostess instructor.

Others were D. W. Heep, director of terminal service; W. S. Borden, manager hostess/purser procedure; P. E. Illman, manager passenger service training; D. M. Newton, field representative; K. M. McAninch, instructor station training; Harold Mason, superintendent station training; H. S. Turner, manager commissary.



IN TRAINING—Two women and seven men from TWA headquarters, Kansas City, Mo., take first Convair 880 hostess and steward course in Convair SD customer service training location this month.

Firm Decisions, Definite Goals Urged by Ehricke In U.S. Race For Space

Convair already has a great tradition in space exploration to live up to. We must not ask ourselves "What can we do next?" Rather, we should ask, "What do we want to do next?"

Krafft Ehricke, Convair Astronautics space expert, told members of Convair SD's Management Club this month that it must be decided when advanced space systems fit into the overall plan and time the moves with the economy of the country to permit maximum effort.

Ehricke said the government must make firm decisions so that program emphasis is not scattered in all directions. "Assignments should not be split down the middle; otherwise, everyone makes the others' mistakes."

The possibility of energy conversion development on surfaces other than the earth is a major reason why the United States must pursue space exploration, Ehricke warned.

Energy conversion on another planet could be turned into something similar to a "death ray," he said. "With the possibility that such a weapon could be used against us we must conduct our own experiments, not just sit and watch."

It pays to look into the unknown, even if the results are not immediately apparent, he added. "When the first satellite went into orbit, we discovered more riddles and secrets." He cited the discovery of belts of intense radiation around the earth as an unexpected discovery in near space.

The Astro scientist discussed advanced plans for interplanetary exploration, emphasizing the need for boosting bigger payloads into space.

A still unanswered question for the space voyager, he said, is whether or not we can get him down following a period of weightlessness. An astronaut would be weightless while in orbit, then experience, upon reentry, stresses eight or nine times greater than those of gravity.

Ehricke said he believed that whoever solves the problem of "rendezvousing" (actual physical contact with astronauts in space) will have a definite advantage in the space race.

He said he was impressed with the American astronauts when they visited Convair Astro recently. They were more concerned with accelerating the Mercury man-in-space program than slowing it down for trifles. "They said the risk was already so great, that a little more did not greatly matter."

'Space Ship' Coating Materials Tested for Resistance to Heat

Materials which may coat vehicles going into space are being tested by the special chemistry projects group of Convair San Diego's materials and processes laboratories.

By means of the lab's infrared spectrophotometer, organic compounds can be "fingerprinted" to see just what qualities they possess—how much heat they will reflect or absorb.

These studies may determine types of materials which will be used around engines of space vehicles, or to coat objects within the space ships themselves, explained E. E. Keller, materials and processes lab assistant supervisor.

Present studies for space research projects can ascertain just how certain materials will react to extremely high temperatures or to ultraviolet radiation by a "before" and "after" examination of molecular changes.

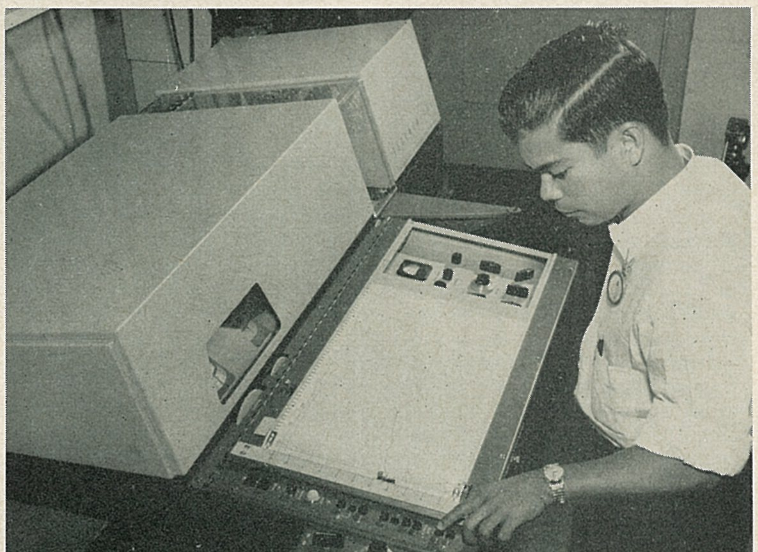
Taking the guesswork out of analysis of materials, the two spectrophotometers in the lab, one for short wave lengths and the other for long, have proved of great value in Convair research in accurate and quick identification of compounds. A drop of liquid can be analyzed exactly in as short a time as 15 minutes.

By subjecting the material to infrared radiation, the wave length, showing the particular characteristics of the material, is scanned and recorded on permanent file cards for future reference. Source of the radiation is a "Nernst glower," small heat-resistant element made of high temperature oxides such as zirconium, yttrium, and thorium. The radiation is split up by prisms made of ordinary rock salt to get a single wave length which is detected by a thermocouple and recorded on a scanner.

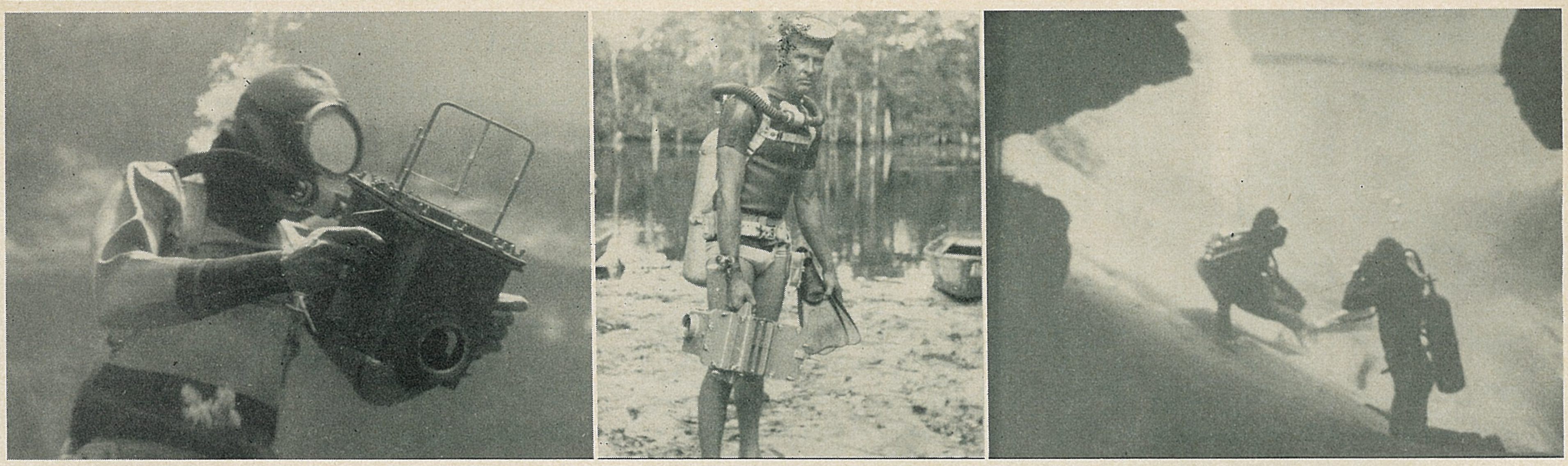
Solids, liquids, and gases can be analyzed. The different materials that combine to make up adhesives, lubricants, hydraulic fluids, sealants, fuels, and protective coatings can be recognized by their absorptions at various wave lengths and positively identified.

Operators Francis Graber and John Trias have been called on to analyze a tiny drop of oil to determine just what part of a plane it has come from. In other "trouble-shooting" assists, contamination—foreign particles or gummy substances—in such materials as fuel oils and paints has been positively identified for separation and future elimination.

Infrared spectrophotometers also are in use in other parts of Convair SD, in Plant 2's process control lab, in electronics, and in physics function of engineering, for studies pertaining to their particular projects.



MATERIAL TESTING—John Trias identifies organic compounds by wave lengths on infrared spectrophotometer in Convair SD materials and processes lab.



COLD AND CLEAR—At Morrison Springs, Fla., two Convair FW diver-photographers have had watery field day. In center is E. E. "Gene" Eichholtz, garbed for dip with underwater motion picture camera and at left he is shown under surface in photo snapped by F. E. "Fred" Carlile, using adapted Rolleiflex. At right, enlarged from 16 mm movie film, are Carlile and Eichholtz at mouth of cave. The men were at the Florida location on B-58 assignment.

Divers Explore Florida Caves

During a recent seven-week assignment to B-58 flight testing at Eglin AFB, Florida, two Convair Fort Worth men spent a part of their weekends underwater, skin diving.

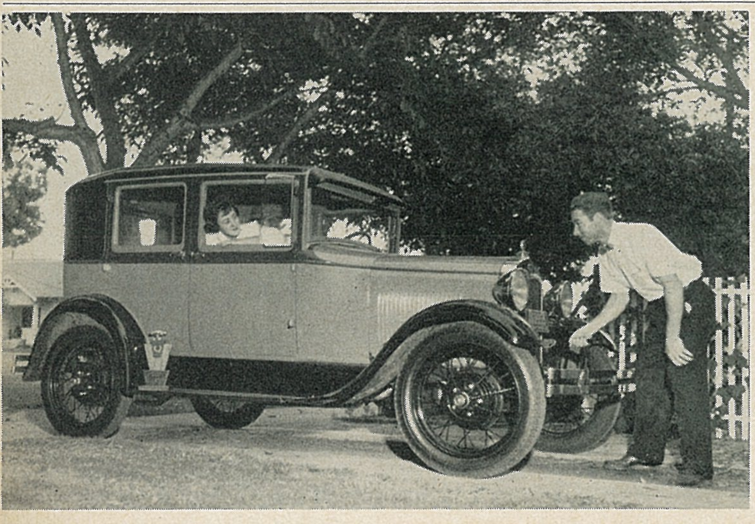
E. E. "Gene" Eichholtz, senior design engineer in Dept. 6-4, and F. E. "Fred" Carlile, photo lab assistant supervisor, Dept. 17-2, took advantage of nearby Morrison Springs to experiment with underwater photography and explore unique submarine caves.

The spring, about 50 miles from Fort Walton, Fla., is one of the largest in the world, gushing an estimated 65 million gallons of water a day. Skin divers have descended to 290 feet into clear, fresh, 68-degree water. Diving technique is the same as in salt water, except that the diver is not quite as buoyant.

Eichholtz, a five-year diving veteran, descended as far as 150 feet, but most of the diving was at 50 to 100 foot levels.

Photography added purpose to the watery weekends, with Eichholtz operating his 16 mm Pathe A movie camera, equipped with home-built water-tight case. Carlile specialized in stills, using his adapted Rolleiflex.

Both divers took particular care to avoid the eels which are sometimes found in underwater crevices, the only dangerous form of marine life in the spring. Odd varieties of fish made good targets for their cameras.



GOOD AS NEW—Homer Overton (Dept. 27 at Pomona) and his wife, Beverly (Dept. 22), are shown with 1928 Model A Ford they have restored to "showroom" condition over past year. Car recently won first place in Pomona Valley Auto Show. Crank is for benefit of photographer, as car has adequate starter.

$350 Investment

Rebuilt Model A Cruises at 50; 30 Miles a Gallon on Regular

There may or may not be a "Ford in your future," but if you are past the age of 25 the chances are that there has been a Model A Ford in your past, according to Convair Pomona's Homer Overton (Dept. 27).

At any rate, there is a Model A in Overton's present—a 1928, four-door sedan—and it won first place in the "antique class" at the annual Pomona Valley Auto Show last month. He had restored it to "like new" condition.

"I started the job on the sedan by removing everything from the frame except the shell of the body," he said. "I repaired or replaced everything that was worn, and gave the car a complete paint job from the frame up, inside and out."

He also installed a rebuilt engine, and rebuilt the transmission. In fact, all of the "working parts" are new. The car is finished in original colors—"copra drab and seal brown" or two-tone brown.

"I paid $125 for the car, and spent another $225 for parts and engine rebuilding, so the car cost us $350, not including our labor," Overton said. "We now value the car at $750."

Working afternoons, evenings and weekends, the entire restoration took about seven or eight months, Overton said.

The car cruises nicely at 45 or 50 miles per hour, will do 55 without strain, and has a top speed of about 60 "on a down-hill slope." It gets about 30 miles on a gallon of regular gas.

"Many forget that the Model A engine is rated at only 24.6 hp," Overton explained.

The 1927 Model A roadster Overton is currently rebuilding is a much lighter car than the sedan, and he expects that it will do between 65 and 70 miles per hour without strain.

The rebuilt engine in the sedan now has about 500 miles on it, and will not be completely broken in for another 1,500 miles, he said. He believes the car should be able to travel 120,000 more miles without further major repairs.

Overton has been interested in cars for as long as he can remember, and at one time was active in hot rod clubs in the Pomona Valley area (**Convairiety**, July 14, 1954).

"After I restore the roadster, I plan to get a Model A touring car," he said. "With these three cars I should have enough transportation to last me for 15 or 20 years."

Speedy Stork Races Delta 440 and Wins

A speedy stork, with a will to win, recently raced a Delta Airlines' Convair 440 and boarded in mid-flight.

Soaring at 9,000 ft. over Malden, Mo., Mrs. Hugh Ector of British Columbia delivered an 8-lb., 4-oz. girl with the assistance of a Navy medical corpsman and the stewardess.

Ironically, an obstetrician was also on board. He looked in on the amateurs as they assisted with the birth, but said nothing. Later, he explained, "The corpsman was doing such a professional job, I thought he was an obstetrician."

Delta officials showered Mrs. Ector with gifts for baby Suzanne. Among them was a desk set with a model of the 440, a miniature of her birthplace.

Alaska Tour

'Sour Dough' Hal Wilson Home to SD

Back from 28 months in the snowy northland is Hal Wilson, Convair SD field service engineer.

Polar bear hunts, temperatures as low as 50 below, 10-ft. snow banks, strong winds, little sun, and many strong friendships number among Wilson's memories of his more than two years in Alaska. He had been stationed as Convair SD's representative at Elmendorf AFB from the time the first F-102s went to 317th FIS the summer of 1957.



"BLINDERS"—Hal Wilson, Convair SD field service rep, hides behind snow glasses brought back from Alaskan tour of duty.

Though glad to return to San Diego, he finds it a little warm after top summer temperatures of 70 degrees.

Among his mementoes, Wilson brought back a pair of slitted snow glasses of whale bone with caribou hide thongs worn in the extreme north to prevent snow blindness.

A 14-verse departure "eulogy" read at a squadron farewell party in his honor commanded that he "Tell all your Convair staff, and their crew of fancy Dans, not to mix their order for F-102s with those of Prince Albert cans!"

75 Words in 50 Secs. Wins Typing Race

Fred (Mrs. George) Young, Dept. 6-6 Convair FW, won a portable typewriter last week in a typing contest sponsored by a local theater.

Her 75 words in 50 seconds was the best turned in during the two-week contest span. Although she types on an electric typewriter at work, her competition speed was set on a manual.



WHIRLYBUG—J. C. Cox of flight is first Convair Fort Worth "whirlybug" to build his own helicopter during spare time. He plans first test flight within two weeks.

'Gyrocopter' Doubles as Scooter Or Aircraft—Take Your Choice

With a few months work, J. C. Cox, Dept. 12 Convair Fort Worth, now has sky unlimited before his eyes.

He has built his own "gyrocopter" and plans his first test flight in November.

Cox, B-24 pilot during World War II and B-29 pilot in Korea, bought gyrocopter plans but the finished version will include his own modifications. For instance, the fin will be in the shape of a B-58 silhouette.

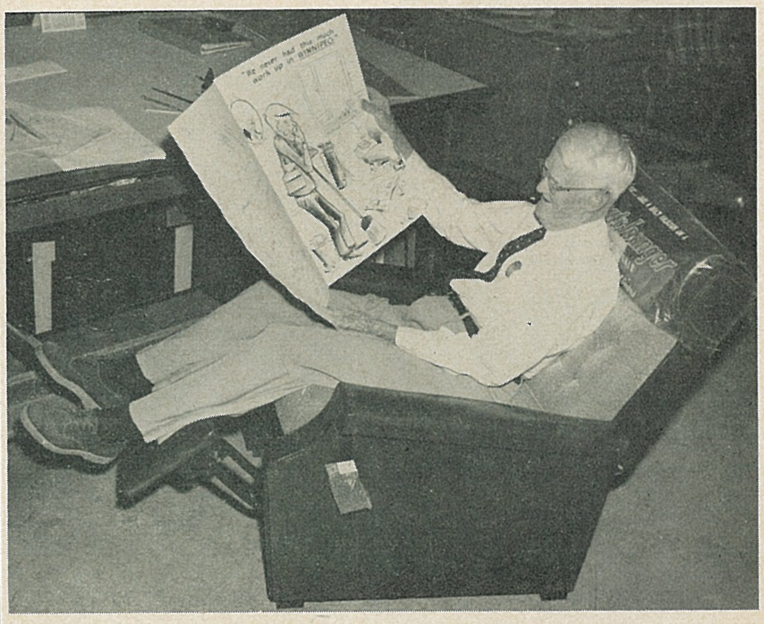
The majority of parts for the copter were made by Cox with hand tools in his garage. He did buy the 72-hp engine, wheels, rotor and prop. Total cost will be about $400 or $500.

First step in learning to fly the gyrocopter is reading an instruction manual. Then the gyro-pilot is on his own, learning the actual flying by feel.

Cox is already a licensed pilot, but the Federal Aviation Agency requires only a student license for gyrocopter flying. The craft itself requires an experimental license.

The gyrocopter can be driven along the street (with air lift blade locked) like a motor scooter or can fly at top air speed of 85 mph. Highest ground speed is 60.

It depends on forward motion to stay airborne (with lift obtained from the free-turning overhead blade), so it cannot hover like a helicopter. However, it can maintain altitude at speeds as low as 15 mph.



RETIRES AT 80—H. H. "Ham" Hamilton, FW Dept. 6-5 engineering illustrator, tries out chair, a retirement gift from friends. He joined Convair when he was 66 and now is 80. Ham expects to get in more golf (he has had time for only weekly game until now!) and maybe Florida trip. His long life explanation is: "Heredity!" Father lived to 94 and an uncle to 96.

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Limited of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.

First CL-44, Conventional Side-Loader, Leaves Factory, Swing-Tails to Come

First CL-44 Canadair's new turboprop transport, has left the factory at Montreal and Canadair reports serial production is well advanced.

The airplane, largest ever built in Canada, has these dimensions: wing span, 142 feet, three inches; wing area, 2,075 square feet; length, 136 feet, eight inches; height, 38 feet, seven inches; cabin length, 98 feet, seven inches; cabin height, six feet, nine inches; cabin width, 11 feet, five inches.

Powerplant is four Rolls-Royce Tyne turboprops, 5,730 e.h.p. with 16-feet diameter de Havilland propellers. Speed is up to 400 mph with cruising at 370. Maximum range is 6,275 statute miles, carrying a payload of 33,700 lbs. Maximum weights at takeoff and landing are 205,000 lbs. and 165,000.

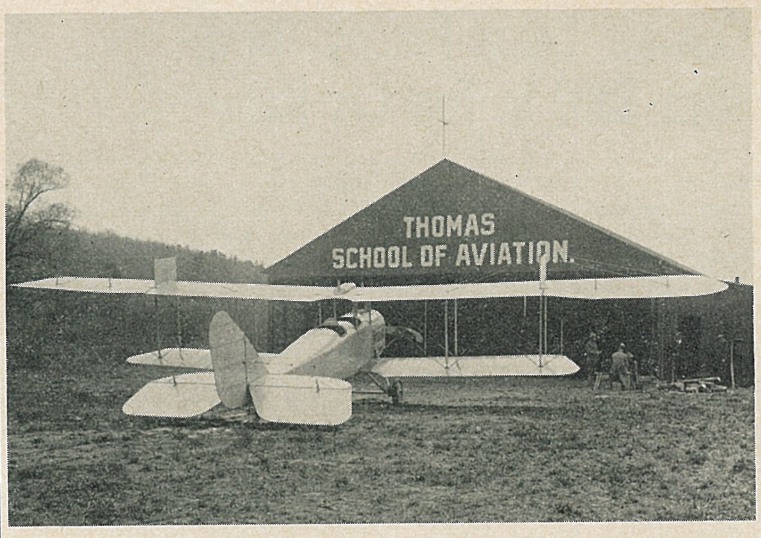
Pictured below is the conventional side-loading version of the transport, 12 of which have been ordered by the Royal Canadian Air Force. Swing-tail, rear-loading versions for freight transport have been ordered by Flying Tiger Line (10 on order) and Seaboard and Western Airlines (five on order).

First flight of the CL-44 is expected by mid-November.

Canadair this month published issue No. 1 of a "Canadair Forty-Four News Bulletin" which will report progress on the new freighter-airliner project.



POSED—First Canadair Forty-Four, long-range, four-engine turboprop transport, poses on tarmac behind Canadair's Montreal plant. It is largest aircraft ever built in Canada. Swing tail loading versions of this aircraft will follow later.



EARLY AIRPORT—D-5 observation plane is shown at Ithaca, N.Y., airport, one of nation's earliest municipal fields.

95 mph U.S. Speed Record Claimed For Thomas' D-2

(This is installment No. 20 in Convairiety's continuing history of Convair Division of General Dynamics Corporation.)

Following his association with Glenn H. Curtiss, B. Douglas Thomas joined Thomas Brothers Co. of Bath, N. Y. He was no relation to William T. Thomas, the firm's founder.

For Thomas Brothers he designed a new biplane, the T-2, an effort to improve on the Model J drawn for Curtiss.

Designer Thomas was unsalaried but worked under an agreement that he would supervise construction and receive half the profits. Work began at Bath but the company transferred operations to Ithaca, N. Y., Dec. 7, 1914, where the Board of Trade had offered an attractive inducement—a year's free rent on a three-story building on Brindley Street. The flying school was set up on one of the country's earliest municipal airports, a dirt runway carved through a peach orchard on the shores of Lake Cayuga.

The T-2 flew in the spring of 1915. A British purchasing commission tested it and placed orders for 24. Hopes for additional orders faded, however, because of a growing shortage of Curtiss OX engines used to power the plane. Consequently, the company on Aug. 5 founded its own engine-building auxiliary, Thomas Aeromotor Co. Its first product was the 135 hp Thomas Model 8, a geared vee type designed by George Able and Harold Bliss, two officers of Aeromotor.

Thomas designed the D-2 for this power plant, and the company claimed an unofficial American speed record of 95 mph. A contemporary volume of Jane's Aircraft pictured the D-2 as the first U. S. plane to exceed 100 mph.

(Howard O. Welty, now of Astronautics Division, who researched this history of Convair, commented on the Jane's statement: "Even in those days, airplanes sometimes made their fastest times on typewriters.")

A pair of pontoon-equipped D-2s designated Model HS were sold to the Navy in 1916.

By the latter part of 1916 it was apparent that the Thomas enterprises would require additional financing if they were to remain in business. This led to organization of the Thomas-Morse Aircraft Corp. on Jan. 31, 1917. The Morse Chain Co. of Ithaca paid off the indebtedness, put up working capital and took control as the only stockholder. (A principal stockholder in Morse Chain was Herman H. Westinghouse, of the air brake family.)

Frank L. Morse, president of the parent company, headed the new corporation. W. T. Thomas was named vice president, and the Thomas Brothers' general manager, J. A. Fried, became treasurer. B. Douglas Thomas continued with the organization as chief aircraft design engineer. Except for the post-war S-7 trainer, he was responsible for all aircraft designs produced by Thomas-Morse during the life of the company. (W. T. Thomas left the firm about 1921, and for many years devoted his time to building and flying powered model aircraft.)

★ ★ ★

'Observation' Ships Popular

Thomas Brothers D-5, pictured at the top of this page, was a two-place "observation" biplane, built in 1916. Two were built and sold to the Army Signal Corps Aviation Section. Span was 52 feet, nine inches; length 29 feet, nine inches; gross weight 2,550 lbs. Wings were of unequal span (the lower wing was 34 feet). Its engine was Thomas Model 8,135 hp, maximum speed 86 mph. It could climb to 3,600 feet in 10 minutes.

"Observation plane" is an unused military classification today. However, it was of major importance in the 20s and 30s. Post-World War I doctrine gave combat aviation three functions—to attack the enemy in the air (with fighters) and on the ground (bombers) and to work with friendly ground forces (observation plane). Army procurements in the 10 years from 1921 through 1930 included 208 bombers, 695 fighters and 1,593 observation planes.

Dr. Miller Now Asst. Director

SAN DIEGO—Dr. Frederic de Hoffmann, president of General Atomic Division, has announced appointment of Dr. Park H. Miller Jr. as assistant director of General Atomic's John Jay Hopkins Laboratory for Pure and Applied Science.

Director of the laboratory is Dr. Edward C. Creutz, vice president - research and development of General Atomic Division.

Dr. de Hoffmann said Dr. Miller's appointment to the new post reflects the steady growth of the laboratory's technical staff and the rapid expansion of its programs.

Dr. Miller, who is an expert in the field of solid state physics, joined General Atomic in 1956 from the University of Pennsylvania where he was professor of physics.

Submarine Library Maintained by EB

GROTON—A display tracing the development of the British submarine was arranged at the Submarine Library here to coincide with the arrival of a United Kingdom submarine squadron.

The Submarine Library is open to the public daily except Sunday from 9 a.m. to 5 p.m. It is sponsored by Electric Boat.

The first British submersible was patterned after plans of the USS Holland, founding ship of the American Submarine Service. The Holland, commissioned in 1900, was built by Electric Boat. The Groton shipyard is now lending technical assistance to the British for construction of the nuclear-powered HMS Dreadnought.

Nuclear Project Managerships Assigned Three Engineers by Electric Boat

GROTON — Three engineers have been assigned nuclear project managerships at Electric Boat Division.

Thomas W. Dunn of Stonington, head of the Triton nuclear project since 1955, was named project manager for Electric Boat's participation in an Atomic Energy Commission program called Natural Circulation Reactor (NCR). Dunn will head an EB staff working on design and construction of an NCR power plant whose principal target will be substantial simplification of nuclear submarine propulsion systems by elimination of the main primary coolant pumps.

John A. Serrie has been named to replace Dunn as Triton project manager.

Ira A. Glass Jr. becomes Tullibee project manager. Glass replaces Joseph D. Pierce, previously assigned to manage the newly-formed contract control department.

Stromberg-Carlson Vice Pres. Appointed

ROCHESTER — Appointment of Richard C. Palmer of Chevy Chase, Md., as a vice president of Stromberg-Carlson Division was announced this month by Robert C. Tait, president.

Palmer will manage Stromberg-Carlson's office in Washington, D. C. In addition to his Washington responsibilities he will assist Stromberg - Carlson management in Rochester in the coordination of company - wide government relations programs and military marketing. He comes to Stromberg-Carlson from Fairchild Engine and Airplane Corporation.



"Oh, I'm just putting in a new washer."

EB Purchasing At $40 Million

GROTON — Atomic submarine building here has pumped nearly $40 million into the nation's economy during the past year according to figure released recently by General Dynamics Corporation.

The money went to 2,874 different business firms in practically every state as the shipyard wrote more than 34,000 purchase orders for materials and services.

Of the firms receiving orders, 77 per cent are classified as "small" businesses, employing less than 500 persons.

Geographically, the Middle Atlantic States did the biggest volume of business with the shipyard. Next in line was New England.

S-C Sales Manager Named at San Diego

SAN DIEGO—George W. McGinley has been appointed sales manager of Stromberg - Carlson at San Diego, Warren C. Dunn, manager of marketing, announced this month.

McGinley will be responsible for all sales activities of high-speed electronic printers, data display and recording devices, CHARACTRON shaped beam tubes and other electronic equipment.



"I'm sorry you got your hopes up, but we can't just total up your gas bills and call it 'loss by fire' . . ."

Convair Team Places Third; Wins $800 in Top Car Rally

Competing against some of the nation's top sports car drivers, three Convair men finished a recent American International Rally in third place and collected $800 show money.

The margin separating the first three cars was only 10 seconds!

George Blondin and Bill Rector of Astronautics and Bob Dunn of San Diego Division drove the 3,200-mile route that carried them from Los Angeles to Denver and back to Las Vegas in four days of travel.

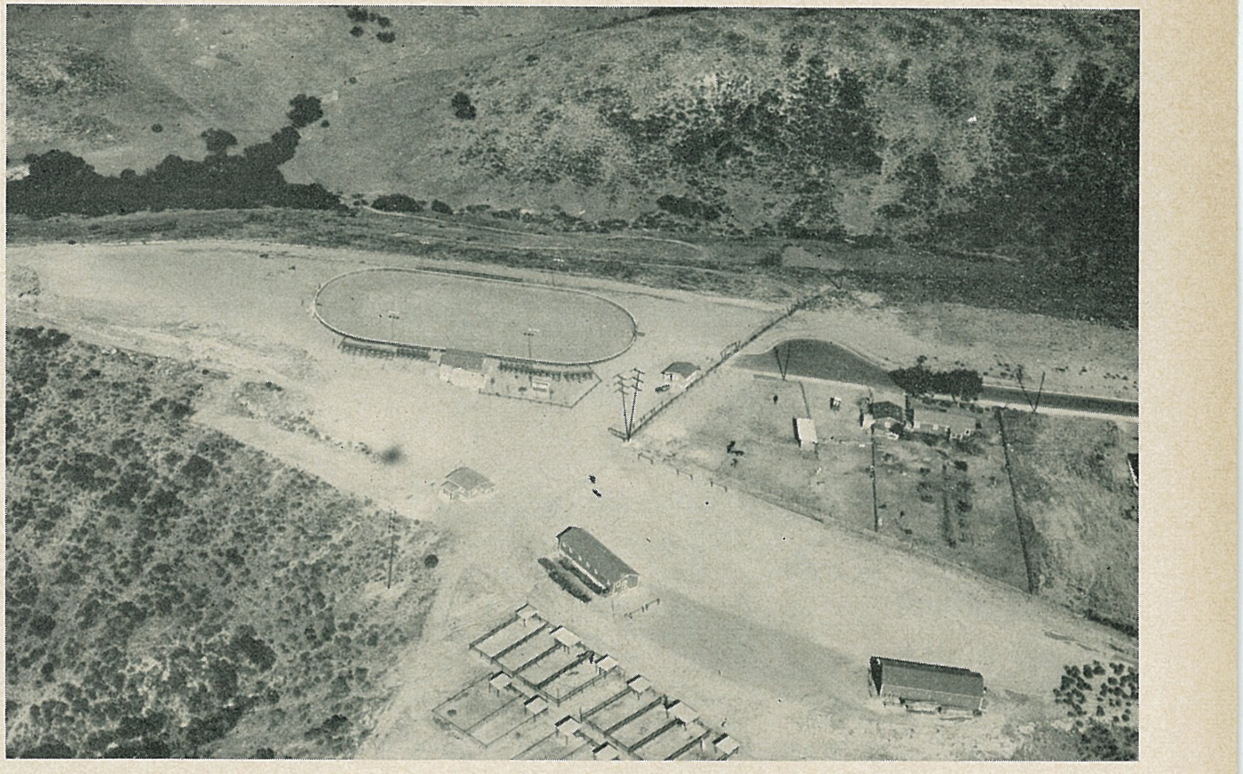
Their Fiat sedan finished with an error of only 43 seconds for the route. A Thunderbird finished with an error of 42 seconds, while the winning Rambler had a 33-second error.

Sixty-eight cars started, 60 finished.

The Convair trio reported "no trouble" for their entire trip. They alternated assignments with Rector and Dunn driving, Blondin, navigating. However, Dunn acted as a "double check" on the route for both driver and navigator.

Blondin navigated with a small hand computer. Dunn made his verifications with a slide rule.

"It was a wonderful trip. Good weather. Nice roads," Blondin said. "We supplemented our rest stops with a thermos of fruit juice and sandwiches."



ACRES AND ACRES—Aerial photo shows Flying Hills Ranch in Fletcher Hills area which Convair horsemen have used extensively in past for breakfast rides, gymkhanas, riding lessons and horse shows. There are 500 acres of riding country nearby.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Oct. 16 through Oct. 31:

Thirty-year: Dept. 230, F. J. Popadowski.

Twenty-five year: Dept. 6-53, P. A. Carlson.

Twenty-year: Dept. 25, O. R. Templeton, H. J. Yogerst; Dept. 31, N. W. Merrill; Dept. 34-5, L. F. Tubbs Jr.; Dept. 145, W. S. Fowler; Dept. 192-7, W. R. Branch; Dept. 233-0, H. G. Rexroad.

Fifteen-year: Dept. 1-41, R. N. Fuller; Dept. 15-4, J. P. Nowak; Dept. 31, Genevieve L. Day, L. K. Thornbrugh, Rudolph Weber; Dept. 129, G. C. Hirst, H. A. Sutton; Dept. 401, J. W. Smith; Dept. 600-3, John Diaz.

Ten-year: Dept. 6, T. H. Massie, L. W. Passano Sr., H. K. Wiard; Dept. 15-3, Alberta W. Smyth; Dept. 171-0, R. C. Szymczak; Dept. 197-0, Olive F. McClellan; Dept. 231, R. L. Barry; Dept. 280-0, J. H. Parson; Dept. 288-5, Irene S. Hannibal; Dept. 292-8, Maureen H. Callan.

Retirements

SAN DIEGO

HAGAR—M. R., Dept. 403. Seniority date Feb. 21, 1951, retirement effective Oct. 15, 1959.

KELSEY—W. E., Dept. 14-4. Seniority date July 19, 1951, retirement effective Oct. 16, 1959.

MEYERS—H. F., Dept. 205. Seniority date Jan. 16, 1951, retirement effective Oct. 1, 1959.

MOORE—Presley E., Dept. 25-4. Seniority date Jan. 20, 1956, retirement effective Aug. 28, 1959.

MYERS—Florence D., Dept. 218. Seniority date Oct. 30, 1951, retirement effective Oct. 16, 1959.

NIKODYM—E. C., Dept. 25. Seniority date June 17, 1946, retirement effective Sept. 30, 1959.

OLSON—H. F., Dept. 406. Seniority date Nov. 21, 1946, retirement effective Oct. 16, 1959.

STEYLE—P. J., Dept. 603. Seniority date June 10, 1953, retirement effective Oct. 9, 1959.

Promotions

SAN DIEGO

Promotions to or within supervision effective Oct. 12.

Dept. 6, Engineering: To hydraulics group engineer, R. W. Casebolt. To asst. foreman, R. L. Picard.

Dept. 171, Field Operations: To foreman, E. S. Needham. To asst. foreman, W. A. Brinkley.

Personals

SAN DIEGO

The family of Nina Marie Cefalu extend their deepest appreciation to the host of Convair friends for the many kind expressions of sympathy and floral tributes.

* * *

I wish to express my sincere gratitude to all Convair SD Con-Trib-Club members for the assistance I received in a time of emergency.

J. A. Shirey, Dept. 123

* * *

We acknowledge with deep appreciation the kind expressions of sympathy from Convair friends during our recent bereavement.

The L. C. McEntee family, Dept. 25

Births

SAN DIEGO

BROWN—Son, David Michael, 5 lbs., 9½ oz., born Oct. 8 to Mr. and Mrs. Edwin Brown, Dept. 8-1. Mother, Judy Brown, formerly Dept. 6.

CULLUM—Son, David Brian, 7 lbs., 6 oz., born Oct. 13 to Mr. and Mrs. William M. Cullum, Dept. 403.

SOBRASKE—Daughter, Maureen Ann, 4 lbs., 13 oz., born Oct. 1 to Mr. and Mrs. Stewart Sobraske, Dept. 600.

Deaths

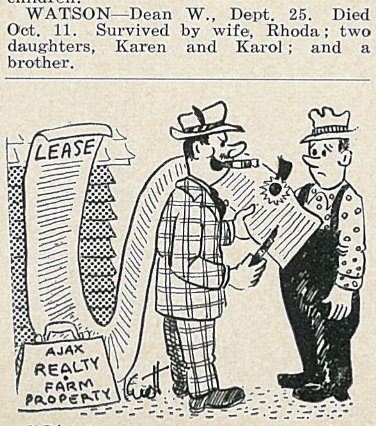
SAN DIEGO

ARNOLD—Charles, Dept. 192. Died Oct. 20.

KALDECK—Leo, Dept. 6. Died Oct. 21. Survivors include his wife, Leola.

PARRISH—Campbell W., Dept. 217. Died Oct. 17. Survived by wife, Sara; son, brother, two sisters and two grandchildren.

WATSON—Dean W., Dept. 25. Died Oct. 11. Survived by wife, Rhoda; two daughters, Karen and Karol; and a brother.



"Oh! Your signature is just a legal formality."

Flight Test Offices Consolidated In Move to Bldg. 4, SD Plant 1

Engineering flight test personnel at Convair San Diego are now in new quarters in Bldg. 4 at Plant 1.

Consolidating all SD production flight test and engineering flight test administration and people in one area, functions under G. E. Putness, SD chief of engineering flight test, have moved out of Bldg. 5 into the southwest mezzanine of Bldg. 4. Entrance is from stairways on the east side of the building although connecting doors will open into the adjoining production flight test office area.

The Bldg. 4 location was repainted and office modules installed for the 200 new occupants.

Only other anticipated move into Bldg. 4, report SD industrial engineers, is E. W. Carlson's administrative staff of electronics manufacturing which will be located on the mezzanine before the end of the year.

In a reshuffle in Bldg. 5 to facilitate flow of work among connected functions, about 150 purchasing and material people will be brought from Rose Canyon, Plant 1 and Plant 2 locations to the 5-2-J area the weekend of Nov. 7.

Subsystems purchasing people reporting to W. G. Evans, general purchasing agent, subsystems, and engineering procurement group of W. G. Kilgore, buying supervisor, will come to Plant 1 from Rose Canyon. Portions of material control under George Davidson and Norman Grand will go to Bldg. 5 from present locations in Bldg. 1, Plant 1, and Bldg. 4, Plant 2.

On the same weekend, technical and administrative personnel of SD materials and processes laboratories under E. F. Strong, chief of structures and materials lab, will move upstairs into the 5-2-H area of Bldg. 5's second floor. The area across the hall, 5-2-G, will be occupied by planning and estimating, engineering procedures, management improvement data control groups.

Human factors, reliability, and acoustics groups of engineering will move from Bldg. 4 into the 5-2-E area at the same time.

Five Years Ago...

Following are brief excerpts from Convairiety of five years ago:

★ ★ ★

New Convair-Liner version is revealed, capable of hauling 15,000 pounds of cargo over medium airline ranges.

★ ★ ★

Convair YF2Y-1 Sea Dart, fastest water-based aircraft in world, exceeds speed of sound for first time.

★ ★ ★

"Major medical benefit plan" is offered employees at Convair divisions.

★ ★ ★

Air Force orders 33 Convair-Liner Model 340s, bringing total sold to almost 400.

Musick Snags Top SD Fishing Award

Four Convair SD fishermen took home cash awards in the September contest sponsored by the CRA Fishing Club.

Top prize, $15, went to H. D. Musick (Dept. 6) who caught a 24-lb. salmon. Ten dollar second place money was won by Max Guess (Dept. 192) for a 22-lb., 10-oz. yellowtail.

W. E. Burnett's (Dept. 21) 124-lb. marlin ranked third, good enough for a $7.50 award. A similar amount went to M. C. Sullens (Dept. 232), who landed a 118½-lb. marlin.

Trailer Owners Planning Rally

One of the biggest rallys ever staged for owners of small traveling trailers is slated for the Thanksgiving period.

Planned for Del Mar Fair Grounds Nov. 26-29, the gathering will be known as the San Diego Trailer Rally. Among sponsors is Astro Travelers, Astro CRA group, which includes members from San Diego Division.

Robert Post of Astro is a member of the central committee setting up arrangements. Art Wrightson, CRA commissioner, heads a special finance and reservations committee.

Trailers are expected to begin arriving as early as Nov. 25. A full program is planned daily through that weekend. A special Thanksgiving dinner will be served.

Wrightson will make reservations for the dinner and trailer space for those writing him at 1102 Lorna Ave., El Cajon, before Nov. 15. A $5 fee will be charged for the trailers, while the dinner cost will be 35 cents per serving (includes turkey, dressing and gravy).

Magic to Entertain Astro Wives Club

"Prestidigitation" will prevail Nov. 11 when the Astro Wives Club holds a 7:30 p.m. meeting in the Astro executive dining room.

Wandini, one of San Diego's better magicians, will present a program of sleight of hand.

FATE OF ART CLUB HANGS ON TURNOUT

Rise or fall of Convair SD's Art Club will depend upon attendance at a reorganizational meeting next Tuesday (Nov. 3) at 8 p.m. in the Spanish Village Convair studio in Balboa Park.

Gil Crosthwaite, commissioner, said attendance at the meeting will be taken as an indication of continued interest in the CRA activity. If response is poor, the club will be disbanded temporarily.

All Convair artists are invited to attend the session. If enough show up, a schedule of exhibits, shows, life drawing classes and other activities will be scheduled for the next few months.

Big Game Drawing Set for Gun Club Meeting Nov. 10

Convair Astronautics and San Diego Division hunters who have been successful in bagging big game this year are reminded of the special Nov. 10 "big game" drawing slated by the Convair Gun Club.

Prizes include a gun rack, .22 Remington rifle, a camp stove and many others.

Big game includes deer, bear, elk, moose, antelope, javelina, etc., taken on the North American continent.

Successful hunters must fill out a card available at CRA offices to be eligible. From entries, prize winners will be drawn on a lottery basis.

A highlight of the 7:30 p.m. meeting, slated for the CRA Clubhouse at Gillespie Field, will be a movie on hunting in India. It will be presented by Glenn Pearson, local big game hunter.

Executive Program At UCLA Attracting Pomona Students

C. D. Cornell, special assistant to the vice president and manager at Convair Pomona, last month enrolled in a two-semester executive program in business administration at the University of California at Los Angeles.

Jack Mason, assistant chief engineer—administration, is scheduled to begin the program in January. R. D. Webster, manager of material and purchasing, and A. T. Seemann, chief of manufacturing engineering, are currently second semester students.

All four are enrolled in the course as a part of Convair Pomona's executive development program. The UCLA executive program consists of four courses—two each semester—plus special meetings.

T. A. Vogel, chief of reliability and standards, has started the first of four semesters in the engineering executive program at UCLA. Upon successful completion of the program he will be awarded a master of engineering degree.

F. P. Morgan, factory manager, is currently attending an evening course in report and letter writing at the California Institute of Technology. The course, incidentally, is being taught by Cornell.

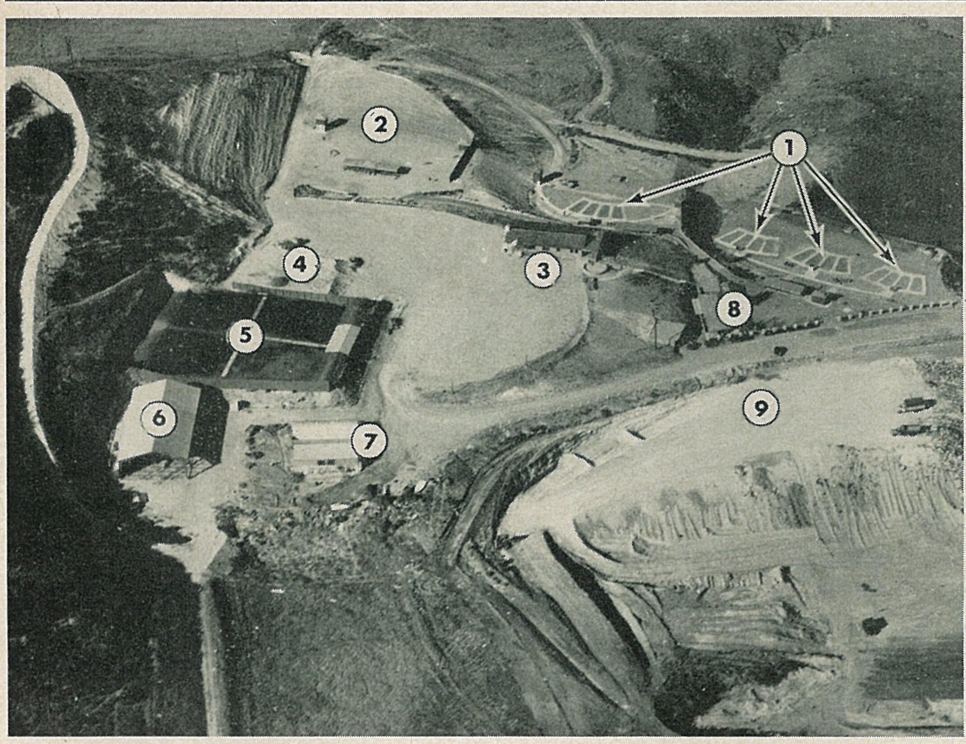
Modelers to Hold Organization Meet

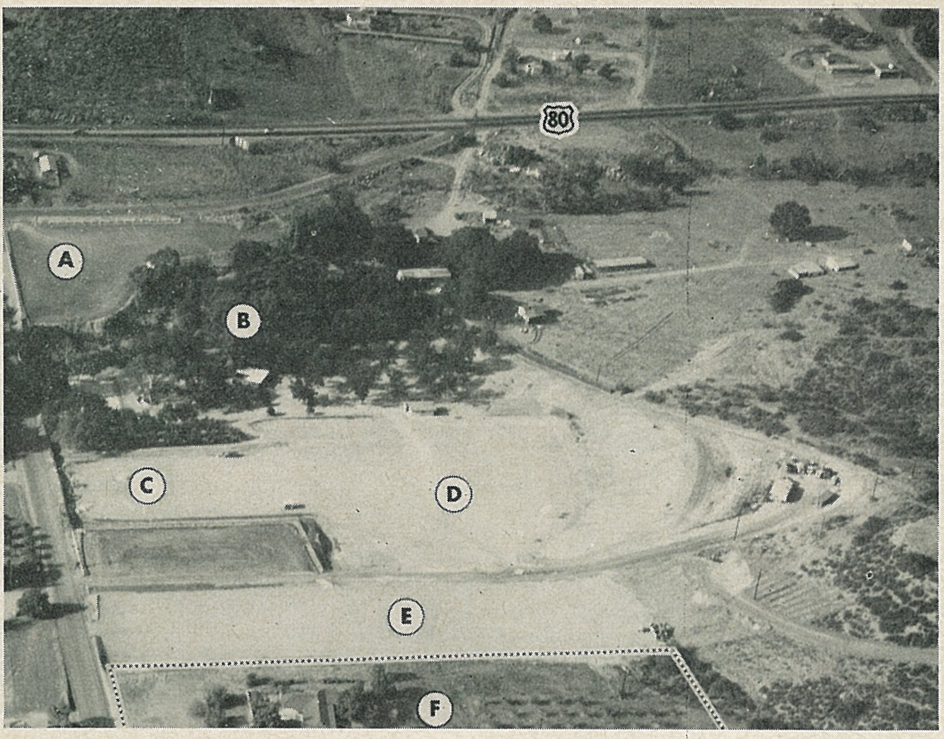
Aeromodelers and model rocket builders at Astro will hold an organizational meeting at 7:30 p.m. tomorrow (Oct. 29) in the Astro executive dining room.

Plans call for staging various events, entering national contests, etc. Further information is available through Jim Conklin, ext. 1111.



DODGER ROOTERS—While Los Angeles Dodgers had many fans at Convair Pomona during recent World Series, few were more active and vocal than Beulah Heckman, left, and Lois Hostetler (Dept. 4). Girls are shown catching up on score during break time.





BOOMING—Gillespie Field (left) and Pecan Park (right) have been under rapid development by Convair SD Recreation Association during past year. Aerial view of Gillespie shows: (1) three crowns at right are cement walkways for trap shoot; on left is facility for both skeet and trap equipped with automatic bird launchers; (2) skeet shoot, also with automatic ejection device; (3) new CRA clubhouse; (4) 50-ft. junior rifle range under construction; (5) combination pistol range and .22 rifle range; (6) building used for construction of fiber glass boats; (7) storage shed for boat building supplies; (8) range director's home; (9) new parking lot under construction. Winding road on extreme left leads to astronomy facility atop hill. Pecan Park aerial shows: (A) entrance and parking lot; (B) picnic area under pecan trees includes barbecue pits, benches, dance shelter, concession stand, etc.; (C) game area; (D) basketball courts and softball fields; (E) upper parking lot; (F) dotted line borders new three-acre purchase obtained last month by CRA, includes house for park director. Dirt road on right forms east boundary of park.

Scholz Named Commissioner

M. E. "Maury" Scholz (Dept. 403), who enrolled as a beginner with Convair SD's Hoedowners seven years ago, last week was appointed co-commissioner of the CRA square dancing group.

J. K. Field, chief of SD employee services, said Scholz would assist veteran Hoedowner commissioner, P. E. Liggett.



M. E. Scholz

Scholz worked at Convair between 1941 and '46. He rejoined Convair in 1952 and has been a member of the CRA Hoedowners since that time. For the past nine months he has served as president of the club.

Born in Saskatchewan, Canada, Scholz moved to Nebraska in 1918. He was employed by the Central Electric Gas Company in that state for a number of years.

The new co-commissioner lives with his wife, Dorothy, also an avid Hoedowner, and their son, William, 16, at 4164½ Georgia St. in San Diego.

SD Baseball Team Enters City Play

A CRA baseball team has been entered in the San Diego American League which starts play this week, Pete Beyrer, commissioner, reports.

The squad is managed by Ed Moraga, who played professional baseball in Arizona. He is also one of the front-line hurlers for the team.

Some of the returning veterans of other hardball campaigns at Convair SD are John Murillo, John Hartsell, and Nick Ferguson.

In a practice game Oct. 18, Convair dropped an 11-7 decision to Haynes Streamliner. Ray Peery, third baseman, had four for five in the losing effort, blasting a triple, homer and two singles.

Gal Hoopsters Set Practice Tomorrow

The girls' basketball team at Convair SD, which finished in second place in city competition last year, will hold its first practice of the season tomorrow (Oct. 29) evening.

Members for the squad are badly needed, with only two of last year's starting team back for action. All gals at Convair SD with any hoop experience are invited to play. For practice time and place contact Jean Todd, ext. 1017, Plant 1.

CRA Sports & Recreation Convairiety

SD Squad Wins Archery Shoot; Beats Astro, Ryan, Rohr, NAS

A team of Convair SD archers outshot squads from Astronautics, Naval Air Station, Ryan and Rohr to win the team championship Oct. 11 of the Industrial Recreation Council archery shoot at the Astro range.

Members of the championship team were Tom Boling, Al Phipps, John Platt and Bob English.

J. B. Bence, club spokesman, said 28 targets were shot in morning matches, and winners determined on a percentage basis, both in barebow and freestyle.

In addition to the first place team finish, three Convair SD archers won individual honors. Bob English led the championship class in the barebow division; Bence took Class B honors in the same category. Mike Phipps took first place in the junior division.

Hosted by the SD and Astro clubs, the shoot was the first IRC competition of its kind. Ralph Smith, director for San Diego City Park and Recreation department, presented team and individual trophies.

A big event on tap for SD archers will be held Nov. 22 when the Southern Border Archery Association stages its annual turkey shoot at the San Diego Field Archer's Range.

More than 30 turkeys will be given as prizes during the competition.

Golfers Slate Turkey Sweeps

Entries are now open for the Convair SD turkey sweepstakes scheduled for Nov. 7-8 at Torrey Pines, Ken Wulfemeyer, golf commissioner, reports.

Deadline for entries is Oct. 4. To register, call ext. 1705, Plant 1. A number of turkeys for tourney winners will be awarded by the CRA.

In results of golf action earlier this month at Caliente, Ernie Reid (Dept. 8) took low gross honors in the first handicap group (0-12) with a 76, followed by John Parry (Dept. 6) with 77. Low net winners were Dick Ramsdell with 67 and John Mellett (Dept. 15) who tallied a 68.

In the 13-19 handicap group, Jerry Swartz (Dept. 288) shot a 75 for low gross. Runner-up was Mike Luban (Dept. 31) with 84. A low net of 70 took first for George Hasti (Dept. 180), two strokes better than Cal Bates' (Dept. 292) score.

In the 20 and over group, Lee Snyder (Dept. 600) led the way with a low gross 91. Bob Selle (Dept. 600) stroked a 93. L. Kuhn (Dept. 288) handicapped a 68 and Fred Dorris (Dept. 6) a 69.

CONVAIR SD GIRL WEDS ASTRO MAN

Ceremonies Oct. 2 joined a Convair San Diego bride, Mary Lewis (Dept. 15), and an Astronautics groom, Donald A. Hunter (Dept. 220). They were united in a quiet ceremony at the home of friends.

Swap Session Set For Snow Ski Club

Convair SD's Snow Ski Club will stage its first business meeting of the new season Nov. 3 at 7:30 p.m. in the House of Hospitality, Balboa Park.

Joe Harris, commissioner, said a swapping session will be held in conjunction with the meeting, adding that it affords an excellent opportunity for beginners to purchase equipment and clothing with which to start the season.

Regular meetings of the group will be held the first and third Tuesdays of the month in Room 12 of the House of Hospitality.

Ice Skating Gets New Commissioner

Martha Woodberry, CRA commissioner of the Choralaires and Women's Activities at Convair SD, will take on additional duties as commissioner of CRA's Ice Skating activity.

She replaces Bud Davies, veteran SD CRA member, who has been transferred to Astronautics. Special skating sessions for Convair SD folk are held each Thursday at Iceland, 6055 Lake Murray Blvd. Special rates and lessons are offered between 6:30 and 7:45 p.m.

Inquiries on the activity should be directed to Mrs. Woodberry, ext. 1245, Plant 1.

Basketball Tryouts Set For CRA City Hoopsters

First basketball tryouts for Convair SD hoop teams entering city competition will be held Friday (Oct. 30) and Tuesday (Nov. 3), both at 7 p.m. in the Balboa Park Municipal Gym.

Gil Crosthwaite, basketball commissioner, invited all Convair SD hoopsters with high school or college experience to attend the sessions. The number of teams entered in city leagues will depend on the number and caliber of players trying out, according to Crosthwaite.

He also said that shop league basketball will start with an organizational meeting the first week in December. He asked departments interested to start organizing teams now. League play, however, will not start until after the new year.

Other information on basketball activities can be obtained by calling Crosthwaite after 1 p.m. at ext. 1245, Plant 1.

Last year, CRA entered two teams in outside hoop competition. First and foremost was a Tool Manufacturing entry that finished the regular season with an unblemished record of 10 wins and no defeats. The second team, the Eagles, ended up near the bottom, but threw standings into turmoil with three surprise wins during last three weeks of the season.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ART CLUB—Reorganizational meeting Tuesday (Nov. 3), 8 p.m., Spanish Village Convair studio, Balboa Park.

BADMINTON—Open play for families Tuesday evenings at 7:30 in Balboa Park Federal Bldg.

BASKETBALL—First tryouts for CRA city teams Friday (Oct. 30) and Tuesday (Nov. 3), both at 7 p.m. in Balboa Park Municipal Gym. First practice for Girls' Team tomorrow (Oct. 29); call Jean Todd, ext. 1017, Plant 1.

BOWLING—Entries now open for Industrial Tourney Nov. 7-8 and 15-16 at Pacific Recreation. Contact Jim Hayman, ext. 1155, Plant 1; or Mike Brooks, ext. 583, Plant 2.

BRIDGE CLUB—Next session Nov. 3, 7:30 p.m., Barcelona Hotel, 4th and Juniper.

CHORALAIRES — Rehearsals each Monday evening 7:30 p.m. in CRA Clubhouse on Pacific Hwy.

GOLF—Entries now open for CRA sweeps Nov. 7-8 at Torrey Pines. Call ext. 1705, Plant 1, before Nov. 4.

GUN CLUB—Big game drawing at meeting 7:30 p.m. at CRA Gun Club, Gillespie Field.

ICE SKATING—Convair night every Thursday; discount rates between 6:30 and 8 p.m. at Iceland, 6055 Lake Murray Blvd.

MOVIES—Reduced price movies each Tuesday night at Academy Theater, 3721 University Ave. Nov. 3—"Bandido" and "Golden Blade." Nov. 10—"Gunfight at the OK Corral" and "Fraulien." Admission: adults, 25¢; children, 15¢.

RADIO CLUB — Meeting tomorrow (Oct. 29) at 7:30 p.m. in Harbor Drive headquarters.

SOLO FLYERS—Get-acquainted meeting, film showing Friday (Oct. 30), 7:30 p.m., Jim Air Service, Lindbergh Field.

SNOW SKI CLUB — Meeting and swap night Nov. 3, 7:30 p.m., House of Hospitality, Balboa Park.

WOMEN'S ACTIVITIES—Advanced charm school starts Nov. 11.

FILMS ON FLYING SET FOR MEETING

Three short films, filled with tips for pilots, will be shown at a meeting of the Convair SD Solo Flyers this Friday (Oct. 30) at 7:30 p.m. in the club's classroom at Jim's Air Service, Lindbergh Field.

Vic Korski, commissioner, invited any private-aviation minded Convair SD folk to attend the session. Business portion of the meeting will be directed toward setting up a program of activity for the next three months.

A "get-acquainted" period will precede showing of the films, subject matter of which range from "how a pilot steers a plane" to "how well an airplane flys by itself."

Riggs New Prexy Of CRA Car Club

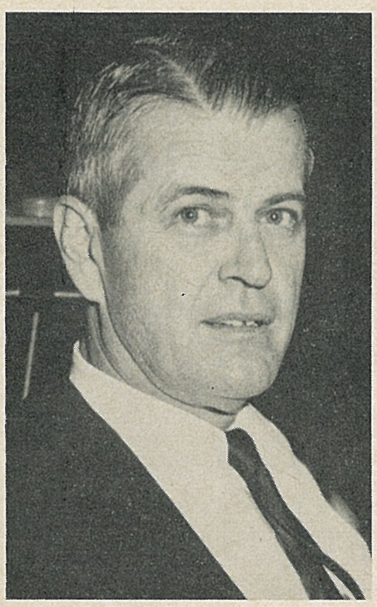
A new slate of officers was installed by the Convair SD Sports Car Club at a Sands Hotel dinner and dance Oct. 23 with 60 members in attendance.

Spud Riggs (Dept. 6) heads the new officeholders as president. Others are Tom Jackson (Dept. 15-6) vice president; Barrie Freeman (Dept. 6), treasurer; and Hilda Ochodnicky (Dept. 1-15), secretary.

Drag races will be on tap Nov. 15 when SD drivers join with Astro Sports Car Club members at Hourglass Field.

'Silent Sam' Shannon Honored By Experimental Test Pilots

E. D. "Sam" Shannon, former chief of engineering flight test at Convair SD and the first man to fly a delta wing ariplane, was



A FELLOW—E. D. Shannon, first to fly delta wing aircraft, is now fellow of Experimental Test Pilot Society.

made an honorary fellow of the Society of Experimental Test Pilots at an awards banquet Oct. 10 in Los Angeles.

The honor is reserved for pilots no longer active in test flying, "but whose accomplishments in the profession . . . in particular and in the advancement of the aviation endeavor in general have been unique and outstanding."

Now an engineering staff specialist for SD, Shannon was a test pilot for nearly 20 years, most of that time with Convair San Diego. And during the bulk of his active test piloting for Convair SD he was the division's premier experimental pilot.

Although he made a number of important "first flights" (among them the XB-46 jet bomber, from Lindbergh Field, April 2, 1947) "Silent Sam" is remembered best as the first man to fly a delta wing. It was the airplane then called the 7002 which he flew successfully from the dry lake beds of Muroc (now Edwards AFB) Sept. 18, 1948. The airplane later was designated XF-92A and from its delta wing design came the F-102s and F-106s.

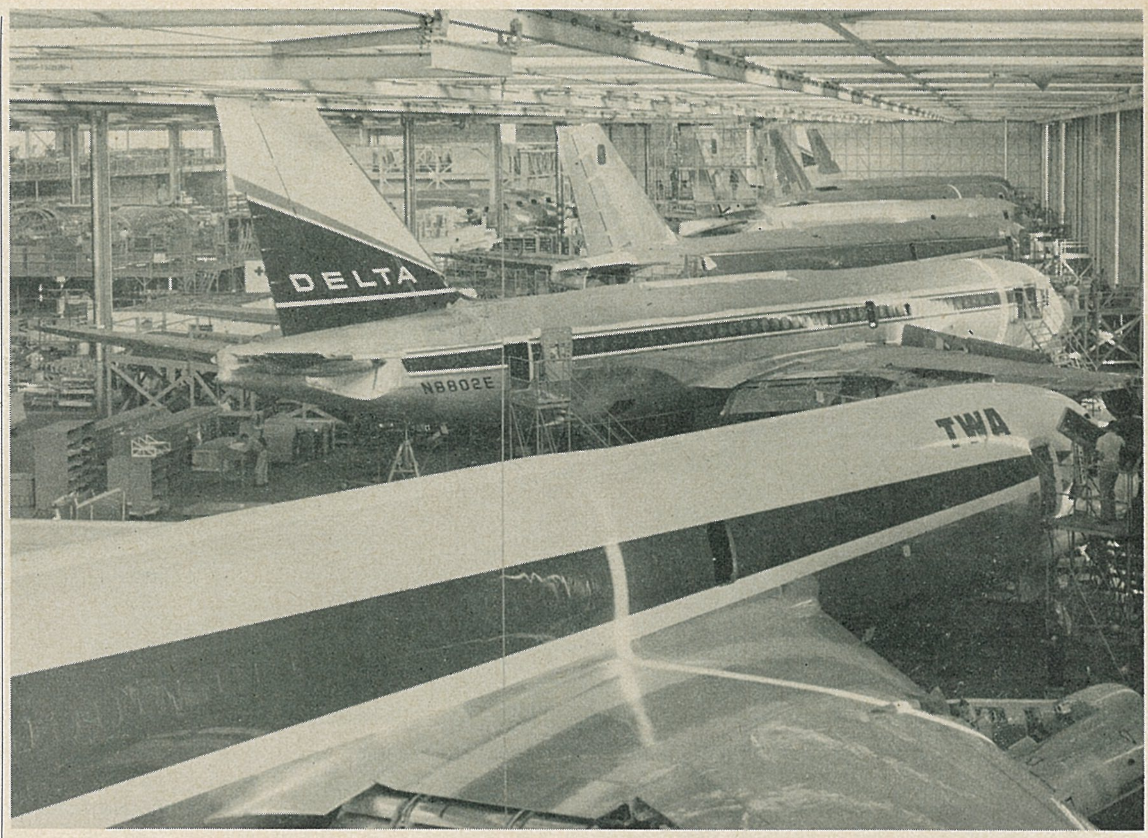
Sam could handle the delta wing on water, too. It was he who first took the XF2Y-1 (Sea Dart) into the air, July 29, 1953, from the surface of San Diego Bay.

Two SD Men Travel 110 Miles, Horseback

Two Convair SD Riding Club members, Don Wescott (Dept. 216) and Luke Barbour (Dept. 280) this month relived four days of the "Old West," horsebacking from Tucson to Tombstone, Ariz. with the Tima County Sheriff's Posse.

The pair spent nine-hour days in the saddle as they traversed the rugged country. In all, 32 riders made the trek, including two cooks and two helpers. They left Tucson on the 110-mile jaunt the morning of Oct. 13, arrived in Tombstone at 3 p.m. Oct. 16.

Evenings, they stopped at ranches and camped out overnight. In Tombstone, they took part in the community's "Helldorado" celebration.



FULL LINE—For first time six Convair 880s fill final assembly building at SD Plant 1 in various stages of major mate and final assembly before ship No. 6 (in foreground) was rolled out of Bldg. 3 recently for completion before going to field operations.

Water, Foreign Matter Filtered From Fuel Entering Hustlers

Jet fuel for B-58 Hustlers now can be cleaned free of water and foreign matter down to minute particles the eye can't even see.

It's a job done by a new filter separator put into operation recently. The JP4 fuel goes from a fuel tank truck through the filter separator truck and into the aircraft.

The separator is capable of filtering fuel at a rate of about 600 gallons a minute. At this rate, you could fill your auto gas tank in two seconds or less!

And even at this rate, it removes foreign matter as tiny as two microns in size. This is about .000078, according to Marce Stevens, process control engineer assigned to the project.

Further, it removes all free water. Any water that's left remains in solution.

This minimizes chances that water might freeze in the fuel system to result in engine failure.

The new filter, technically known as a "filter-coalescer," removes a much greater percentage of water and foreign matter than was possible under methods previously used at Convair Fort Worth.

Convair is one of the first aerospace manufacturers to use the new type system, although it has been used by Strategic Air Command for some time.

The new filter, called Perma-Dry, is built by Permanent Filter Corp. of Los Angeles.

Adequate filtering of the jet fuel is considerably more vital than was filtering gasoline for piston engines for several reasons.

Some jet aircraft use about five times as much fuel an hour as do prop-driven planes. This means the jets are subject to about five times as much contamination from foreign matter in fuel. So it has to go.

Further, jet engines are built to much closer tolerances than piston engines, thus making it even more critical to eliminate contamination.

In addition, jet fuel tends to soak up more moisture, complicating filtration.

The new filter system even has safety guards: it automatically stops fuel flow when too much water is getting through or when filters overload.

Process control department will monitor the filters, testing each unit once a week.



DE-CONTAMINATION—From fuel tank truck, right, through new filter center and finally to B-58 at left, jet fuel is freed of any water and particles. Inspecting operation are S. R. Allen of traffic, Marce Stevens of process control and W. E. Harwell, Dept. 20-2.

Obscene Material Sent to Children

Obscene material will be sent through the mail to an estimated one out of every 35 school-age children during the next year.

The Post Office Department warns that racketeers obtain children's names and addresses from various sources, send pornographic material right to the family mail box. Parental cooperation is needed to trace the senders.

If it happens at your home, save all the material (including envelope) and deliver it by mail or in person to the nearest postmaster who will take appropriate action.

So! We're Making Compact Cars, Yet

Convair received some unexpected publicity recently through the Green Bay (Wis.) Press-Gazette.

A newspaper clipping received by Mary F. Romig, staff scientist, Convair scientific research laboratories, San Diego, announcing Chevrolet's new "compact car," described it throughout as a "Convair."

Astronauts Flying F-102s in Practice

Convair - built fighter - interceptors are being used by the country's first space men for flying practice.

Two F-102s based at Langley AFB, Va., are assigned to Project Mercury for exclusive use of the seven astronauts now in training as the first men to be sent into space by the United States.

The planes are painted gray with white vertical stabilizer, rudder, and speed brakes. Project Mercury insignia, when selected, will be carried on the stabilizer.

30-Inch 'Dish' Built in Pilot Shop Used for Field Test of Sun Rays

A solar energy collector made in the pilot shop at Convair FW is now at Salt Lake Flat, Utah, gathering sun rays and reflecting them to a pyrheliometer to be measured.

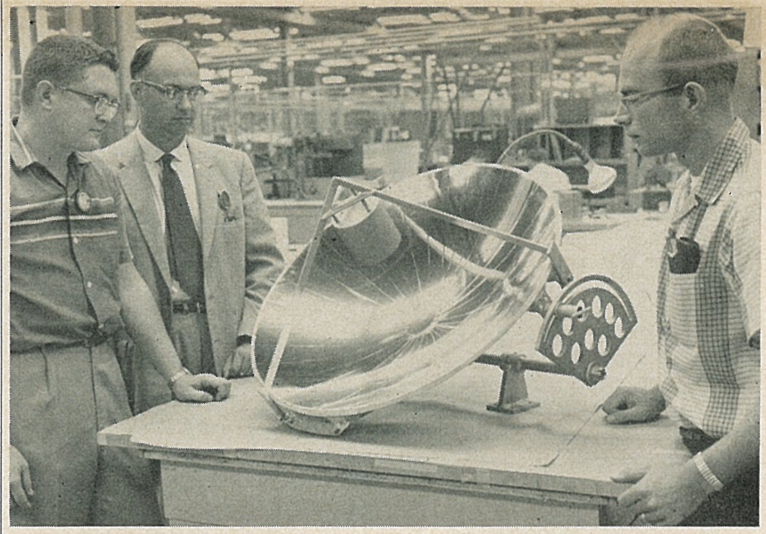
Convair built the 30-inch "dish" to get the strength required for field experiments. The apparatus is more than twice the size of the usual laboratory collector.

Circular, with a slightly conic surface, it gives the appearance of a large aluminum soup bowl. From the surface, the rays of the sun are reflected to the focal point a few inches outside the collector, where a pyrheliometer is set up. The pyrheliometer does the actual measuring.

Since solar radiation is a factor in atmospheric diffusion, tests will be valuable in studies of both atmospheric and cloud diffusion.

Fred Leopard, Dept. 6-8, was technical designer of the energy collector, and mechanical design was done by R. E. "Dick" Arms, Dept. 6-8.

Reuben Fields, Dept. 6-8, is directing the experiments.



COLLECTOR—Solar energy collector at Convair FW reflects sun's rays to energy measuring device at center. Inspecting it (left to right) are R. E. "Dick" Arms and Reuben Fields, Dept. 6-8, and Charlie Johnson, Dept. 23-1.

First Passenger Seats Arrive For Installation in Jet 880

First passenger seats for a Convair 880 jet transport arrived at Convair San Diego Plant 1 the middle of this month.

Slated to go into the first production plane for Trans World Airlines, the ship's set numbers 36 double seats for 72 passengers. Next set, for Delta Airlines' first Convair 880, is scheduled for delivery the first of November.

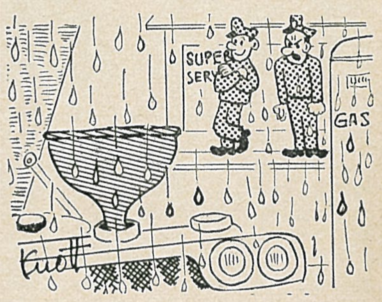
The large contour seats are of ductile aluminum alloy, upholstered with plastic foam for passengers' comfort. Fabrics were selected by the airline customers in consultation with Dorothy Draper Inc., New York City designers.

Colors chosen by TWA are vermilion alternating with groups covered with a textured fabric of beige with brown and white thread stripes. The cushion covers are fastened with the new adhesive nylon felt stripping, Velcro, replacing zippers and snaps. Removable bottom cushions are designed to serve double duty as life preservers in case of "ditching."

Built-in features include adjustable head rests, folding food trays, ash trays, pockets for folders and maps, and stewardess steps to provide accessibility to overhead hat racks.

Sliding center arm rests and seat belts attached to energy shock absorbers will provide maximum safety.

Designed by Convair SD engineers, 880 seats are being fabricated by National Seating Co. at Mansfield, Ohio.



"Oh no, Bob! Not another labor-saving idea."

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

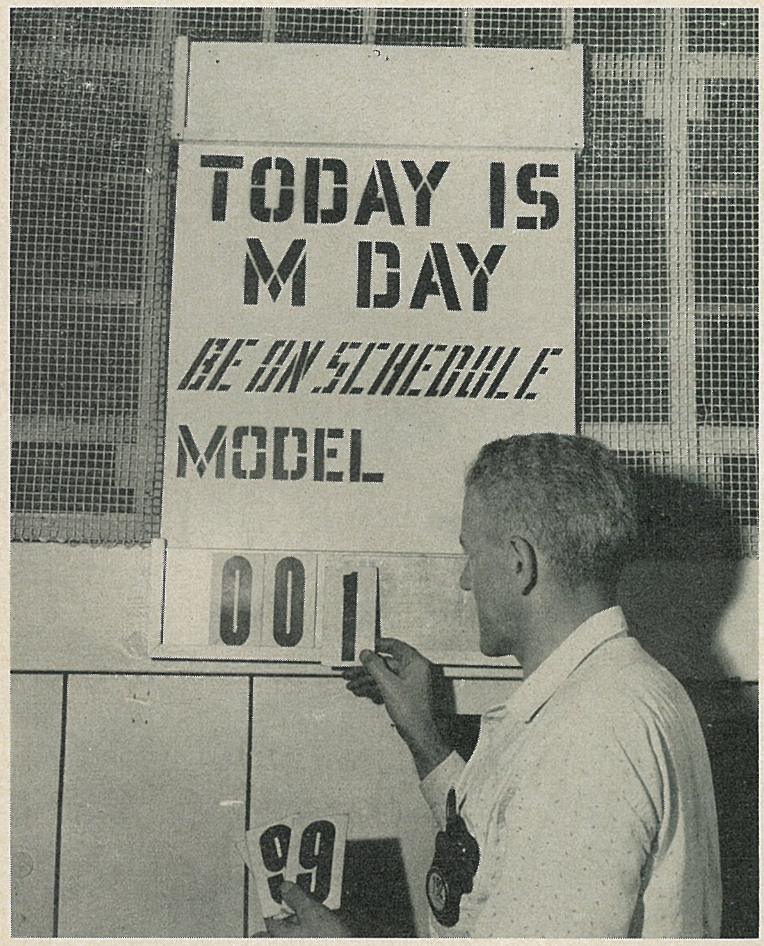
San Diego EDITION

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. — AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



FRESH START—Eddie Pineiro of SD-Dept. 192-1 puts up first number of new M-Day calendar year on Convair SD work board in preview of change-over to new sequence next Wednesday (Nov. 18).

M-Day Calendar at SD Will Turn Back to 001

Convair San Diego is turning over a new leaf.

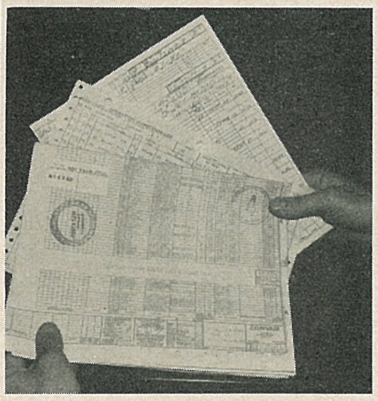
The Manufacturing Day calendar currently in use at Convair SD will finish its 1,000-day run on Tuesday of next week. (Nov. 17). Wednesday will see the first number of the new sequence, 001, go up on work boards throughout the plant.

In continuous use at Convair SD since 1952, the present M-Day calendar is completing its second cycle. It takes almost four years for the 1,000 days to be checked off. For a five-day working week, there are 253 working days in a year.

The Manufacturing Day calendar keeps track of all working days, omitting Saturdays, Sundays, holidays. An industry-wide means of scheduling, it is used in the planning of all shop work and makes possible the use of IBM equipment instead of former manual handling of schedules. M-dates are carried on all paper work moving plane parts through the factory process and on all blueprints.

A similar system was in use at Convair SD during World War II when the plant was on a six-day working week. After a lapse of several years, the M-Day calendar was revived about the first of June, 1952.

R. R. Sammon, then staff assistant to B. P. Gibbons, at that time chief of manufacturing control, who had responsibility for putting the calendar into effect, remembers that Memorial Day weekend as a "hectic three days." Calendars were printed overnight for distribution throughout the plant and work boards were made, painted, and hung "in one of the greatest floor shows" on record, said Sammon, now in Astronautics industrial engineering.



DATED PAPER—Above forms (OIL, 2057 traveler, blueprint) make up most of paper work accompanying parts through shop processes. Al carry M-dates.

All existing calendars of the first sequence show the M-Day figures beginning with the first of January, 1952, but, according to Sammon, the first date actually used was the Monday after Memorial Day. G. D. McVicker, assistant manager of Convair commercial sales, signed the first M-Day calendar in his capacity at that time as assistant chief of SD manufacturing control.

It is estimated that many thousands of manhours and dollars are saved every year in the more efficient method of scheduling all plant operations. There are few departments of Convair SD which are not directly or indirectly affected by the use of the calendar.

Calendars are prepared by industrial engineering department and responsibility for changing the 60 work boards hanging in all parts of the factory areas of Plants 1 and 2 lies with manufacturing control. The dates on the work boards are changed each night at the end of the second shift.

NOVEMBER				
M	T	W	T	F
989 2	990 3	991 4	992 5	993 6
994 9	995 10	996 11	997 12	998 13
999 16	000 17	001 18	002 19	003 20
004 23	005 24	006 25	26	007 27
008 30				

SD Counts 19 In Running For '59 Cost Award

Nineteen Convair SD flat-salaried men, who have saved Convair nearly $1½ million, are in the running for the 1959 President's Award, top annual honor for cost reduction activities.

Up to the end of October, 19 top candidates, representing San Diego and its off-site bases, led the field in qualifying for the annual CIP award.

Each is well over the $25,000 minimum necessary to qualify, according to E. E. Hartzler, cost reduction supervisor. Together, they have piled up a savings total of $1,425,706. Many of the award nominees have qualified on the basis of one idea.

"One idea is all it takes," Hartzler said. "A good number of others are quite close to the $25,000 minimum. One more idea could boost them over the top."

All CIPs installed during November and December will be counted toward the 1959 award. Last year, a total of 21 Convair SD men qualified for the honor, with savings to their credit of $1,336,000.

The award, presented each year since 1954 by Convair's president, is customarily given at a meeting of the Management Club. Last year's award went to Kent Sinclair, a supervisor in receiving inspection.

Winner receives an individual bronze plaque, and has his name engraved on a similar perpetual plaque in the division manager's office; a certificate facsimile, and a $250 merchandise gift of his choice.

Final standings are decided on a point system, taking into consideration the amount of dollars saved, number of CIPs submitted, and number of CIPs installed. Also taken into account are originality, ingenuity and completeness of proposals as well as safety and housekeeping records of departments.

Following are in running thus far for 1959 President's Award with savings to their credit: G. S. Hopps (Dept. 4), $128,484; Ralph De Sola (Dept. 6), $38,862; G. E. Trimlett (Dept. 6), $129,456; R. W. Shaffer (Dept. 15), $137,948; R. H. Feeley (Dept. 34), $32,075; R. C. Fildes (Dept. 34), $64,093; B. J. Wood (Dept. 93), $137,948; D. W. Kennedy (Dept. 116), $39,594; C. W. Clark (Dept. 143), $77,780;

Also: J. P. Strachan (Dept. 145), $42,790; C. E. Boyd (Dept. 197), $103,092; J. Arena (Dept. 223), $31,654; E. E. Day, (Dept. 223), $30,195; G. M. Loudermilk (Dept. 266), $68,422; J. W. Cox (Dept. 170), $194,880; P. E. Hoover (Dept. 4), $37,572; C. W. Derrick (Dept. 328) $28,206; N. R. Keough (Dept. 31), $36,350; and A. H. Kimble (Dept. 110), $65,980.

Cost Reduction Honor Roll

Installed during the last two weeks:



C. W. Derrick's (Dept. 328-1 Palmdale) CIP will save $28,206 a year.



William T. Toon's (Dept. 25) ES will save $2,797 a year.

SD Con-Trib Gives Tentative OK to $175,000 Donation

First reading of a record-matching $175,000 pledge to the San Diego United Fund was approved unanimously last Wednesday by the Convair SD Con-Trib-Club committee.

Approval of the second reading, which is scheduled today (Nov. 11), is required before the pledge becomes fact, according to J. K. Field, committee chairman.

The $175,000 figure matches the amount contributed by Convair SD last year, which was the largest single gift received by the United Fund. This year, however, Astronautics Division has a like sum for the fund.

Two stipulations were included in the first reading, according to Field. Of the $175,000 total, $5,000 is to be given the Health Foundation and $25,000 is to be held by the United Fund in a "special project" account. Distribution of this $25,000 will be designated by the SD Con-Trib-Club throughout the year.

If finally approved, payment of the Convair SD pledge will be made in quarterly installments.

Not included in the San Diego United Fund designation are Con-Trib donations made at SD's offsite bases (Edwards, Holloman, Palmdale). Recommendations of advisory committees at these locations are considered by the San Diego committee, and funds allocated to United Fund (or similar drives) in those areas.

Of the estimated annual Con-Trib income, one account as in the past will be held in reserve. Field said 10 per cent of the total will be distributed through the Emergency Aid program.

Field emphasized that the United Fund gift is estimated on expected Con-Trib contributions through the year. "Nonmembers are asked to give serious consideration to the Con-Trib round-up campaign now winding up," Field said. "A program such as this needs the support of everyone."

MANAGEMENT CLUB WILL HEAR TALK ON NUCLEAR NAVY

Allan L. Dunning, assistant division general manager of Electric Boat, will be principal speaker at the Nov. 18 meeting of the Convair SD Management Club at El Cortez Hotel.



A. L. Dunning

Dunning will discuss the role of General Dynamics' Electric Boat Division in the development of the nuclear navy.

Sponsored by material department and office services, the evening will start with a social hour at 5:30, followed by a 6:30 dinner. Tickets, at $1.50, are now on sale for Management Club members at the usual departmental outlets.

Dunning will use motion pictures to illustrate his discussion. He is a retired Navy captain with 28 years of active Navy service. During the war, he supervised construction of 45 new combatant naval vessels including the battleships Washington, New Jersey and Wisconsin.

Graduated from the Naval Academy in 1926, Dunning has also received a B.S. and M.S. in Naval Architecture and Marine Engineering from MIT. He has served at Electric Boat in his present capacity since December, 1955.

Music for the "General Dynamics Night" meeting will be provided by the Tyrolean Five. As usual, proceeds from the raffle will go toward the Management Club's scholarship program.

Monroe Heads New Reliability Section For SD

Creation of a new engineering reliability section to strengthen the reliability effort at Convair San Diego was announced recently by W. W. Fox, SD chief engineer.

Heading the new group is W. R. Monroe, who will have the responsibility of coordinating all reliability activities between the engineering department and other departments within the plant. He will report directly to Fox.



W. R. Monroe

Within the new section are two groups — reliability analysis, under L. J. Fogel; and reliability corrective action, headed by W. L. Johnston. Both Fogel and Johnston will report to Monroe and Fogel also will act as adviser on technical matters on Monroe's staff.

Monroe, who joined Convair SD in 1955, has been closely connected with reliability, serving as adviser to A. Burstein, assistant chief engineer, on research and development reliability matters. During the last few months he has been active in the organization of the new reliability section.

He is a member of the reliability policy committee for SD Division, chairmanned by Fox; chairman of the division's reliability working committee; and a member of General Dynamics Corporation reliability panel. He will represent the division on reliability matters outside of Convair SD.

"In view of a significant increase in the importance of reliability in aircraft and missile programs, formation of the engineering reliability section is considered a vital step in the endeavor to establish a strong reliability policy within Convair SD," said Fox.

Convair to Observe Turkey Day, as Usual

Convair people will observe Thanksgiving Day this year on Nov. 26. That Thursday will be a holiday throughout all divisions except for necessary maintenance and security personnel. Work will be resumed at normal times on Friday.

Four-Day Weekends To Mark End of '59

Convair year-end holidays this year will fall on Thursday and Friday, Dec. 24 and 25, and on Thursday and Friday, Dec. 31 and Jan. 1.

This will provide two four-day weekends for celebration of Christmas and New Year's.



SHOPPING TIME—Genive Rickman of Convair Empoyees' Store helps Arline Simmons of SD human factors group choose gift from wide variety of stock on hand for Christmas buying.

Supply of Xmas Toys and Gifts Arrives at Employee Store

A wide selection of toys and gift articles is on hand at the Employees' Store at Convair SD in time for Christmas buying.

Items for both adults and children are offered at discount prices to all Convair people, both SD and Astro Divisions, at the store across Pacific Highway from Plant 1.

On display are electrical appliances, household items of all sorts, electric blankets, jewelry watches, wallets, cigarette lighters. A wide range of toys has arrived in time for Christmas selections. They include dolls, doll buggies, rifles, bowling games boxing gloves, wagons, airplanes, games of all kinds.

Added to this year's stock are transistor radios of different sizes.

Shopping hours will be from 9 a.m. to 9 p.m. starting Monday (Nov. 23) and the store will be open on Saturdays, 9 a.m. to 5 p.m. until Christmas.

Convair shoppers may choose gifts now and place them on lay-away, said W. E. Rickman, store manager. All items on lay-away must be claimed before Tuesday (Dec. 22).

The usual stock of Christmas trees will arrive by Dec. 15, said Rickman, who explained that trees on sale at the Employees' Store were ordered a year ahead so that they can be sold at last year's prices. Convair purchasers will save 50 per cent over regular tree prices.

Two More 600 Jets Ordered

Purchase of two additional Convair 600 jet transports by Scandinavian Airlines System was announced last week.

The new SAS order will make a total of four 600s in the airlines' fleet. SAS will lease two of the joint purchase of seven 600s by SAS and Swiss Air Transport Company Ltd., announced Sept. 30.

Version of the Convair 600 for Swissair and SAS will be known as the Coronado. The jetliner will be capable of 3,850-mile nonstop flights at a speed of 635 miles an hour, the world's fastest commercial jet transport.

First flight of the Convair 600 will be next September. Deliveries of Swissair-SAS transports will begin in the spring of 1961.

Final Filing Date For Exams Dec. 1

Final filing date for California professional engineering examinations to be held in April is Dec. 1, 1959. Application forms are available through Convair educational services office.

Courses to prepare engineers for the April examination will be offered by the University of California Extension starting the first week in January.

Information on the program may be obtained from Carl G. Erickson, ext. 3414 at Astronautics.

'Bonus' Bracelet Goes To Mrs. W. J. Enlund

Owner of the door prize bracelet left over from the Convair SD Management Club dance has been located.

Mrs. W. J. Enlund, wife of a Dept. 280, Plant 2, assistant supervisor, responded early the morning after reading last issue of **Convairiety** (Oct. 28) to claim the bracelet from E. G. Gray, raffle chairman.

She now has a complete set of matching jewelry.

Cal-Western Slates Bar Review Course

A bar review course for the 1960 California Bar Examination in March will be held on 17 consecutive Saturdays and Sundays at the downtown campus of California Western University, 1729 5th Ave.

Saturday classes start at 1 p.m.; Sunday sessions at 12 noon. An organizational meeting was held last weekend. However, registrations will be accepted this Saturday (Nov. 14) at noon.

The course is approved under the California Veterans Bill and the G.I. Bill. Additional information can be obtained by calling Hal Kennedy, evenings GA-4-9245.

Course in Improved Reading Will Start

A reading improvement class, open to Convair SD and Astronautics people, is due to start next week (Nov. 17) at Midway Adult High School, 3249 Fordham St.

Designed to improve abilities in mechanics, comprehension, and interpretation of reading, the class will be held every Tuesday and Thursday, 6:30 to 9:30 p.m.

Prospective students are urged to make advance reservations by calling AC-3-1671.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego, Astronautics, Pomona, Antelope Valley-Holloman and the Mail) by Convair Industrial Relations. General Offices, San Diego, Calif., Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 65,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Alyce Martin. News contacts: AFMTC, Bobbie Waddell, ext. 3038; Vandenberg AFB, Bunny Ingraham, ext. 8-3258; Warren AFB. Bill Jack, ext. 72254.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Bob Vollmer, news editor; Susan Bagby, Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Office, Room 103, Bldg. 301 B, Palmdale, ext. 337. Staff: Richard L. Millett.

ELECTRONICS DEPT. CAPABILITY SHOWN WITH COLOR MOVIE

Premiere showing of "Electronic Capability," color motion picture of Convair SD electronics department, was held last week.

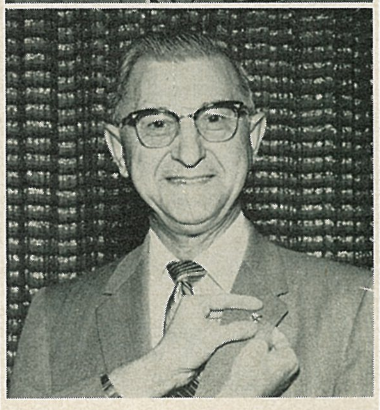
First public viewing of the 18-minute film was Wednesday, Thursday, and Friday during lunch hours in the SD engineering auditorium.

Compiled at Convair San Diego for use in sales promotion, the new film gives a graphic account of activity in SD's rapidly-expanding electronics facility. History of the department, its achievements, current products, and future activities are concisely presented. Some of the products shown are new concepts of radar ground-based antenna systems, data processing systems, ground support and training equipment, optical and microwave instrumentation, fail-proof electronic devices, underwater detection networks.

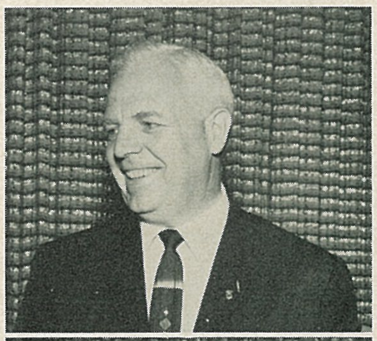
"Electronic Capability" will be taken over the country, or to other parts of the world, to be shown to private and military agencies in the market for electronics products. It also will be available to any Convair group.

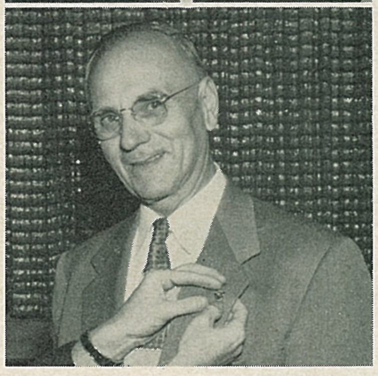
T. B. Taylor, electronics project engineer, coordinated compilation of the movie. Ray Sperry of SD motion picture section was writer; Les Hedgecock, producer and director; Walt Jenevein, editor, and Fred Miller, photographer.





30 YEARS — A. J. Savard, Dept. 6-53 (top), and F. J. Popadowski, Dept. 230, recently received emblems and "gifts of their choice" from B. F. Coggan, SD manager, on completion of 30 years service.





25 YEARS — Most recent to qualify for Quarter-Century Club are these Convair SD men, P. A. Carlson, Dept. 6-53 (top), and K. F. Edelmaier, Dept. 93-0.



880 DISPLAY—Convair SD personnel were among those helping stage annual Aircraft and Missile Equipment Display last month, sponsored by Aircraft Electrical Society of San Diego. Dept. 6 men (from left) are: W. T. Dorrance, E. F. Kotnik, D. G. Moody and C. B. King.

Aircraft and Missile Exhibition Includes Jet Transport Systems

Convair 880 electrical and electronic components and systems were among equipment displayed last month at the third annual Aircraft and Missile Equipment Exhibit sponsored by the Aircraft Electrical Society of San Diego.

E. F. Kotnik, design specialist at Convair SD, organized the display at the Balboa Park Electrical Building. Products of more than 300 manufacturers were exhibited, ranging from tiny transistors to a three-and-one-half ton generator, part of support equipment for the F-106.

C. B. King, senior electrical group engineer at Convair SD, is president of the society, purpose of which is to promote recognition of various phases of electricity and electronics pertaining to aviation, missiles and space vehicles.

Next meeting of the society will be tomorrow evening (Nov. 12) at 7:30 p.m. in the IAS Building, 3380 N. Harbor Drive. Dr. Charles M. Davis will speak on "Harnessing Infrared Radiation in the Space Age."

New SD Executive Assignments Keep Step With Business Needs

A number of new top-level assignments affecting Convair SD, which Division Manager B. F. Coggan said were "a continuing part of our management realignments to cope with changing business " requirements, were announced last month.

W. T. Martin went on special assignment to handle SD-Astro coordination, reporting to T. J. Sullivan; G. A. Covington was named manager of quality control; R. H. Gilliland became chief of inspection; W. H. Rumbaugh is Palmdale manager, reporting to A. W. Morgan; V. F. Cernuto is on special assignment to Morgan "to coordinate integration of Plants 1 and 2"; T. F. McAleer is chief of manufacturing control for both plants and P. G. Osborn is factory manager, both reporting to Morgan; F. H. McLaughlin was named superintendent, reporting to Osborn; A. B. McFarland was named superintendent-experimental factory, reporting to Osborn; A. E. Hill became chief tool engineer, both plants; R. W. Peters was named superintendent, tool engineering, both plants; and E. H. Demarus, superintendent, tool manufacturing, both plants.

W. P. Woods has transferred to Astronautics Division.

★ ★ ★

Transfer of nine Convair men in Dept. 303 at Edwards AFB was announced early this month.

G. F. Miller Jr., formerly of Dept. 302-2 (flight test engineering), succeeds Victor L. Allwardt as project manager (Dept. 303-0). Allwardt has been transferred to SD Dept. 6 as senior flight test group engineer.

Bob Shields, former assistant flight test group engineer, now heads Dept. 303-2, succeeding Miller. C. E. Myers Jr. will head Dept. 303-1 as acting chief test pilot.

New chief of flight test inspection is Alexander Thompson, replacing R. E. Steele who has transferred to Dept. 600 at Astronautics. Thompson was formerly assistant supervisor of inspection.

C. O. Hill, foreman of Dept. 303-4, is now chief of field operations, a position formerly filled by H. L. Sterling who has transferred to Dept. 600, Astro. Also reporting to Astro is Les Greene, former Dept. 303-5 chief. New chief of instrumentation is J. K. Gosnell. Now heading material and manufacturing control (Dept. 303-6) is D. E. Rheaume. He succeeds J. J. Zathan, now with Astro.

Changes were also announced in Dept. 303-7 which is now headed by C. E. Peterson, and industrial relations where M. F. Muir Jr. replaced Larry Failor who moved to Astro.

Donors at Plant 2 Raise Blood Credit

Convair SD's credit with the San Diego Blood Bank was boosted by 74 pints collected from Plant 2 second-shift donors at the Oct. 22 bloodmobile visit.

The October blood donations increased SD's reserve enough so there will be plenty in the Convair account to carry through until December without scheduling another bloodmobile visit this month, said Ken Wulfemeyer of SD employee services.

Next visit will be Dec. 10 for Plant 1 second-shift people. Blood collected then will be credited to Convair SD account for use during the holiday season when the demand for blood is usually high, said Wulfemeyer.

Salvage Yard Hours At Plant 1 Changed

Saturday employee sales hours at the Convair SD material salvage yard will be changed to 7:30 a.m. until 12 o'clock noon starting this Saturday (Nov. 14), said R. H. Lange, SD material sales supervisor.

The material reclamation area, known as the salvage yard, located near Gate 5 at SD Plant 1, is open on Saturday mornings for purchases by Convair people.

CONVAIR MAN'S WORK ON TORQUE PUBLISHED

A novel approach to a technical work on torque, entitled "The Greeks," written by George Cole (Convair SD Dept. 15-5), has recently appeared in Air Force publications in Canada, Columbia, U.S.

ANNUAL FALL DANCE OF IAS THIS FRIDAY

Annual fall dance of the Institute of Aeronautical Sciences (San Diego Chapter) starts at 8:30 p.m. this Friday (Nov. 13) at the Bali Hai, 1325 Yacht Harbor Drive.

498th FIS at Geiger, Equipped With F-106s, Now Combat-Ready

The 498th Fighter-Interceptor Squadron, Geiger Field at Spokane, Wash., became the first F-106 combat-ready squadron in the world when it assumed full air defense alert status Oct. 31.

The 4700th Air Defense Wing at Geiger Field was one of the first two units in the nation to receive the world's newest jet interceptor. F-106s went to Geiger and to McGuire AFB, N. J., in June of this year.

In July F-106s were first used in a simulated combat intercept mission by the 498th FIS of the 4700th Wing. The Wing has continued to use the planes in air defense exercises ever since.

At the present time, more than 60 per cent of the 498th pilots have completed tactical training in the F-106s to gain "combat ready" status. Capt. Dale E. Downing was the first F-106 combat ready pilot.

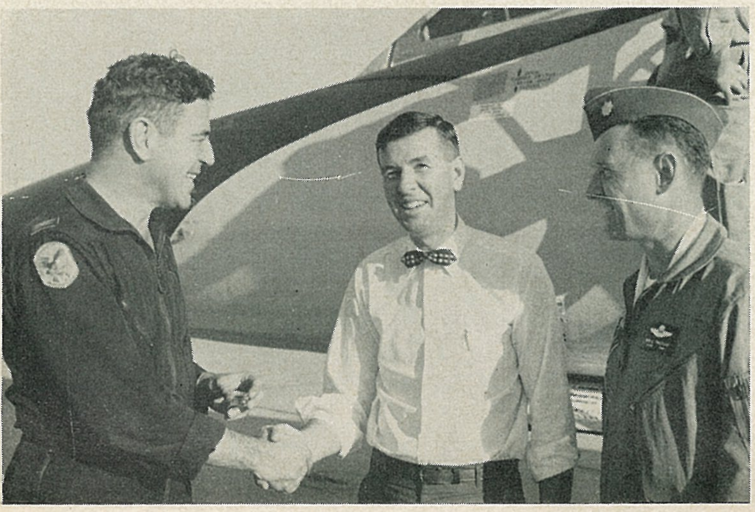
Geiger's 4700th Wing, commanded by Col. Leon W. Gray is the first and only fully Mach 2 flying organization. Completely equipped with Convair F-106s and Lockheed F-104s, it holds the title of "the world's highest and fastest."

Convair F-106s are being phased into four other Air Force squadrons through the U. S.

Last to receive the Mach 2 jet interceptors were the 49th FIS at Loring AFB, Me., and the 4750th Test Squadron at MacDill AFB, Tampa, Fla. Both squadrons received their first F-106s in October.

The 456th FIS at Castle AFB, Calif., has been transitioning into F-106s since the middle of September and the 95th FIS at Andrews AFB, near Washington, D. C., has had F-106s since July.

Slated to receive the Convair-built plane next is the 319th FIS at Bunker Hill, Peru, Ind. So far, all F-106-equipped squadrons, except Geiger Field, are using the planes for crew training and transitioning until they become operational.



F-106 CHECK-OUT—C. W. Stevens (center), Convair SD field service rep, presents Mach 2 pin to Col. Louis W. Ford, 78th Fighter Group commander (at left), after flight in F-106A at Castle AFB, Calif. At right is Lt. Col. Roy Tweedie, 456th FIS commander.

'On-Deck' Low Level B-58 Flights Become Routine

B-58 Hustler pilots have now flown so many "on-the-deck" low level missions that these flights, which only a few weeks ago astounded America, are becoming almost routine.

Convair Fort Worth test pilots and Carswell B-58 test force pilots, after a number of familiarization flights at altitudes of 500 feet or less, continue to praise the Hustler's smooth rides despite rough wind conditions characteristic of low levels.

"The delta-shape wing of the B-58 enables it to fly with small response to atmospheric gusts," explains B. A. Erickson, manager of flight. "This makes a B-58 flight at 500 feet almost as smooth as at high altitudes."

The B-58 is unique among bombers in its ability to fly smoothly in these close-to-earth flight conditions.

Col. John C. Jennison, operations analysis, Headquarters USAF, is among the most recent to praise the B-58's low level capabilities.

One afternoon recently Col. Jennison flew with Erickson on a "routine" low level flight into New Mexico. L. J. Dickerson, Dept. 6-7, was flight test engineer.

They left Convair FW at 3:20 p.m., and were back on the ground at 5:45 p.m., making the full-speed return flight at high altitude.

The run was made in "Old Grandpappy," as flight department has nicknamed airplane No. 1.

Since No. 1 has no nav system, Colonel Jennison navigated on the flight. Erickson reports that the colonel was "pleased with the accuracy of his pre-flight predictions on time elapsed between points. And he was especially impressed with the high quality ride given flight crew members during the low altitude portion of the mission."



"I'm trying to discourage the hired men from asking for raises."

ASHE AND BLETHEN GIVEN NEW TITLES

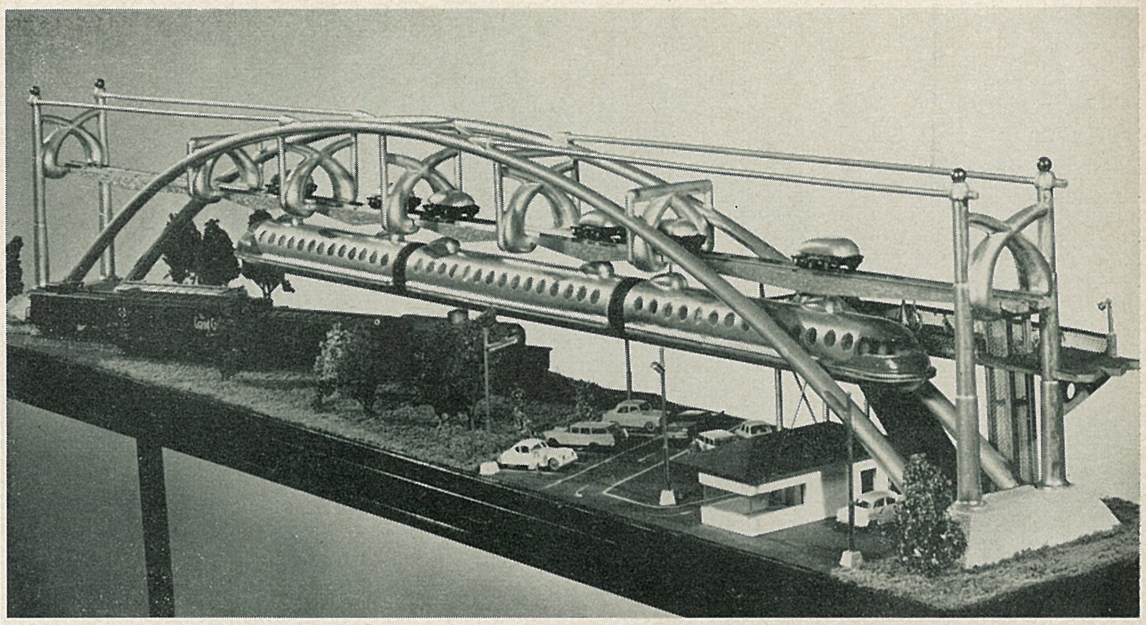
Appointment of Roy F. Ashe as director of estimating and L. E. Blethen as director of budgeting and field auditing in Convair's General Offices was announced early this month by Jack Naish, Convair president.

Both will report directly to R. R. Brewton, Convair vice president and controller.

The manager of field auditing, F. M. Wynkoop, will report directly to Blethen.

Ashe, formerly director of budgets and estimating, has been with Convair for nearly 20 years. He was president of the SD Management Club in 1952.

Blethen joined Convair in March, 1958, as a contract estimating specialist, later served as cost analyst and budget administrator. Previously, he spent seven years with the Wm. R. Whittaker Co. in Los Angeles as controller. He also served with General Accounting Offices in Los Angeles and Flint, Mich.



200 MPH TOPS — This is model of overhead transportation system envisioned by Matthew C. Bayer of Astronautics Division. He will confer with industrialists abroad.

Engineer Will Approach Industrialists With Idea For High Speed Rail Line

In the next two weeks a Convair Astronautics engineer may find a dream of over 22 years approaching reality.

Matthew C. Bayer, senior design engineer of Dept. 545, departs Friday (Nov. 13) for a trip that will take him to Chicago, Philadelphia and Washington, then on to Switzerland and Germany. At each stop he will talk with industrialists interested in his proposed high-speed overhead transportation system.



M. C. Bayer

Bayer has worked to improve his design (**Convairiety**, Jan. 11, 1956) for over 22 years. For three years he has spent his vacations traveling in Europe to talk with interested parties. He has also presented his ideas hundreds of times in this country.

His system is all-steel, featuring strong, rust-proof Monel steel. It consists of dual rails mounted on conventional railroad tracks. Giant paired steel arcs, five per mile, would suspend his system above existing railroads or freeways. While designed for overhead use, the system would permit underground approaches in urban areas.

On these rails would ride trains composed of three carriers, again all steel. Each carrier would be 14 feet in diameter and 86 feet long. Some 180 passengers would ride six abreast, separated by a center aisle.

Electrical power would accelerate these trains to 150 miles per hour in 18 seconds with a top speed of 200 mph. Loading and unloading would be possible in 30 seconds at special stations.

A master control station would electronically control all trains in the system, although a back-up operator would ride each.

Bayer figures the cost at about one-half million dollars per mile.

Photos, Tape to Trace Sequence Of Loading F-106 Armament

Correct procedure for loading and unloading F-106 armament is being compiled in pictorial form at Convair SD for use by Air Force squadrons.

A group of Convair SD men recently spent a week at McGuire AFB, N. J., to gather material and pictures of the entire sequence of action, shooting pictures and tape-recording instructions on the spot.

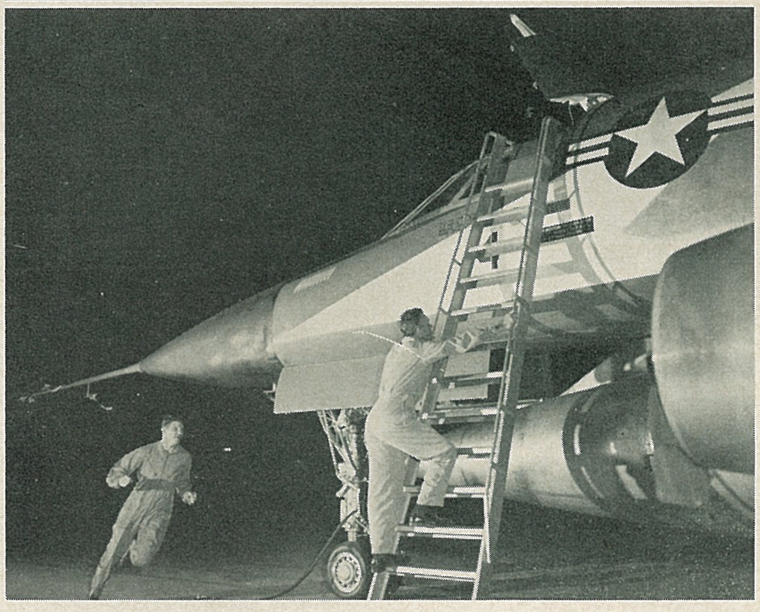
C. M. Keys, senior service engineer, coordinated the task, with J. D. Meacham, publications editor; Charles McCandliss, engineering writer; and Kenneth Watkins, art editor, directing operations. Ernie Flisrand of SD photo lab snapped about 150 shots as an Air Force crew loaded and unloaded Douglas Genie rockets and Hughes Falcon missiles in and out of a F-106.

The 539th FIS supplied the plane, crew, and support equipment.

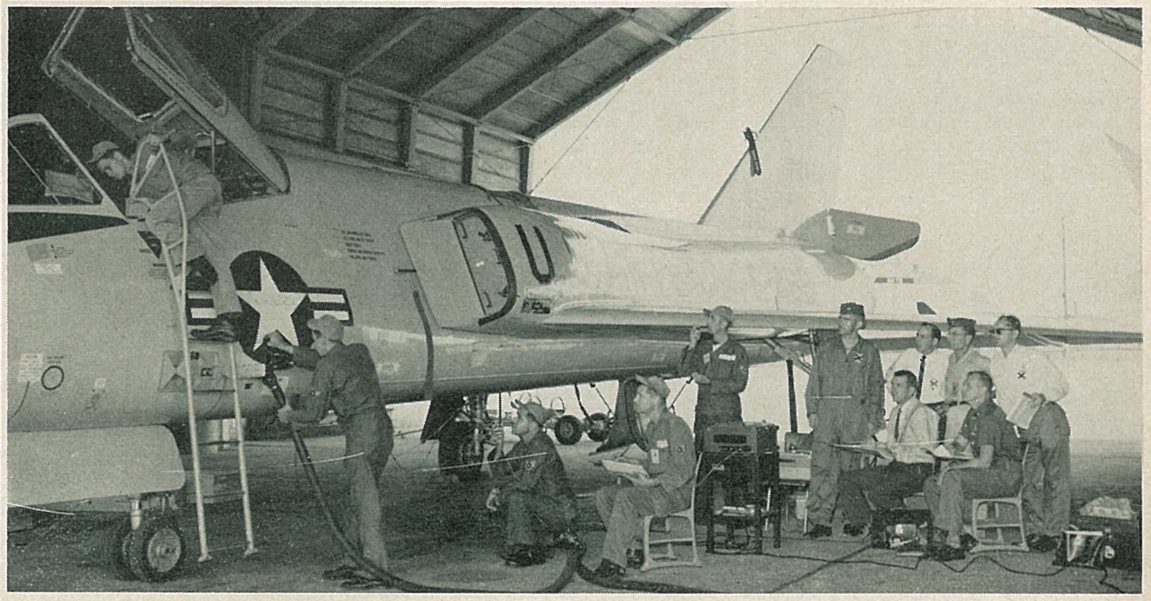
The pictorial descriptive manual is to be used as a supplement to the basic weapons loading procedures manual.

The weapons loading procedures manuals are being compiled and published by Convair SD, under an Air Force contract, for distribution to F-106 squadrons.

Convair SD is the first contractor to prepare job-oriented manuals combining loading procedures for both conventional and special weapons, said H. R. Kennedy, chief of service publications.



STRIKE!—Roy Gray starts up ladder leading to B-58 cockpit as Jim Dyer runs around nose in posed photo illustrating "strike mission" procedures. Fort Worth illustrations group of service engineering is putting finishing touches to special weapons manual for Air Force flight crews.



WEAPON LOADING—Right way to load and unload F-106 armament was caught in picture form and on tape recently by Convair SD editorial group at McGuire AFB, N.J. Convair men, all at far right, are C. M. Keys and Kenneth Watkins standing beside AF officer; J. D. Meacham and Charles McCandliss (seated).



HORSEMEN, TOO—More than half of Fifth Volunteer Cavalry at Cheyenne are Astronautics men. Here Col. Robert S. Lee, Capt. William McKiernan and Lt. Tom Andreson (all Astro) are in foreground. Group rides in parades, special events, acts as honor guard for Governor of Wyoming.

He's Calm, Cool

Electronic Engineer at Pomona Holds $140,000 Ticket in Sweeps

For a man who has just won $140,000 in the Irish Sweepstakes, Convair Pomona's Boyd Holmes is indeed "calm, cool and collected."

Holmes held a ticket on the 25-to-1 winner, Rexequus, in The Cambridgeshire, which was held Oct. 22 in England.

At presstime Holmes had not yet cashed in his ticket, and had no definite idea as to exactly how or when he would receive the money. He also was not sure how much would remain after taxes were paid.

"We were notified before the race that our ticket had been drawn, and that we would be notified within 21 days after the running as to how and when we would receive the money," he said. "So far we have heard nothing further."

At this point about the only thing Holmes is definite about is that a large portion of the money will be invested as an education fund. Holmes and his wife Betty have an 18-month-old daughter, Beth. The money will not cause a drastic change in the Holmes' way of life, he indicated.

"I plan to continue working at Convair and living in Pomona," he said. "We may buy a new home, but we have been planning to do that for a year anyway. And we will buy the same class of home we were looking at before we won the money. About the only difference our winnings will make will be that we will pay cash for carpeting, drapes, etc., rather than going into debt for them."

Holmes said that he intended to continue living within his income from Convair, and that there would be no "foolish purchases." The new home, if and when it is purchased, will be financed and paid for in installments—"Just as we had planned before we won the money."

The Holmes may allow themselves one luxury—a swimming pool. But they haven't decided definitely about this.

"Swimming is the one sport that both my wife and I enjoy—we are both qualified swimming instructors—but we haven't definitely made up our minds about a pool. We aren't rushing into anything," he explained.

About the only change that the Holmes have made so far is a new phone number. This was necessary because they were getting hundreds of phone calls, mostly from salesmen.

Both Holmes and his wife are from Lansford, Pa., and they will observe their fifth wedding anniversary this month. Holmes is 27, an electrical engineering graduate of Pennsylvania Military College, Chester, Pa., and he has been with Convair since March 11, 1957. He was recently promoted to senior electronic engineer. He spent two years on active duty with the Army Signal Corps, and currently holds a reserve commission as a first lieutenant.



SWEEPSTAKERS—Mr. and Mrs. A. Boyd Holmes (he's in Dept. 6 at Convair Pomona) are all smiles as they hold lucky ticket that won them $140,000 last month in Irish Sweepstakes.—Progress Bulletin Photo.

Rocket Society Honors Bossart For Role in Atlas Development

Still another honor has been awarded Karel J. Bossart, assistant to Convair's vice president-engineering, who helped develop the unique design of the Air Force Atlas ICBM.

On Nov. 18, he will receive the American Rocket Society's James H. Wyld Memorial Award at a dinner at the Sheraton Park Hotel in Washington, D. C. It is for outstanding application of rocket power.

In 1958, Bossart was singled out to receive the Air Force Exceptional Civilian Service Award. Earlier this year he was named "Man of the Year in Science" by the California Air Force Association.

Bossart led the engineering team assigned to the MX-774 project in 1946 under the first Air Force study contract for an ICBM. The contract was cancelled a year later because of budget troubles, but three of the missiles were completed and fired in 1948 at White Sands Proving Grounds, N. M. These tests validated such Convair innovations as swiveling rocket engines, ultra-lightweight tank structure and separable nose cone.

The study contract was reinstated in 1951, and assigned top priority in 1954. By 1956, the missile was in pilot production. It is now operational with the first squadron at Vandenberg AFB, Calif.

Bossart joined Convair's Vultee Field Division in 1941 as chief of structures. He came to Convair San Diego in 1947, was appointed assistant chief engineer in 1953 and became project engineer of the Atlas in 1955. He was promoted to technical director of Convair Astronautics in March, 1957.

SD Women Active In Speakers Clubs

Four Convair SD women will have roles at the Fall Conference of International Toastmistress Clubs Nov. 21 at El Centro.

Fran Leland (AF office), chairman of Council No. 7, will be presiding officer. Participating from Delta Toastmistress Club will be Marge West (Dept. 6-35), who will give an educational talk; Joyce Simon (Dept. 2-2) will report on the Speakers' Bureau; and Martha Woodberry (Dept. 3-2), hospitality chairman.

$500 Reward Offered For Return of $3,000

Virgil L. Cole, Convair SD Plant 2 (Dept. 205) is out $3,000 unless some honest Convair person locates and returns the lost three $1,000 bills. Cole is offering $500 reward for recovery of the bills which were dropped some place inside Plant 2 on Oct. 22. They were in a small blue cylinder container. Cole may be reached at ext. 323, Plant 2.

Shades of '67

Astro 'Cavalry' at Warren Relive Injun Fighting Days

WARREN AFB—Astronautics employees, involved in the installation of launching facilities for the Atlas missile near here, are also helping to preserve the memory of fighting forces of almost a century ago.

The Fifth Volunteer Cavalry of Wyoming is dedicated to preservation of tactics and equipment used back in 1867 when Warren AFB was Fort D. A. Russell, a cavalry outpost to defend the builders of the first transcontinental railroad from hostile Indians.

About 60 per cent of this group, organized in 1952, is composed of Astronautics employees.

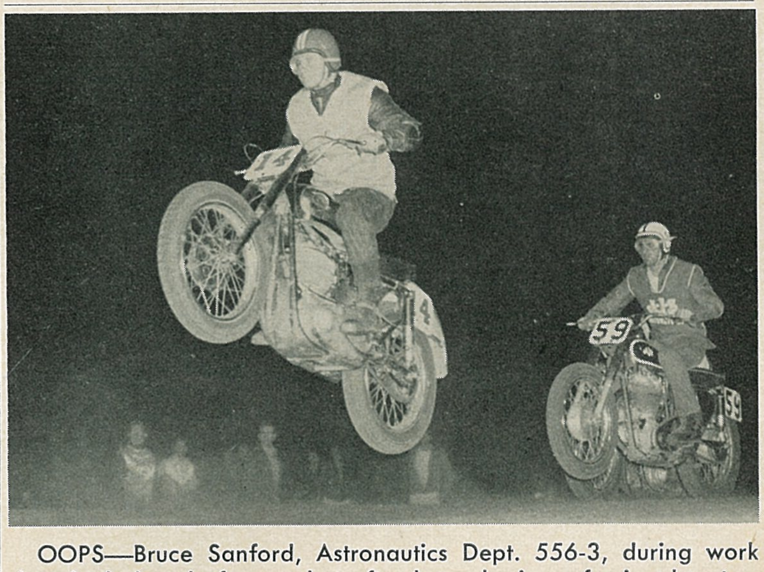
Robert S. Lee (Dept. 611-9) commands the group as an honorary colonel. George A. Calvert, Astro operations manager, is an honorary brigadier general.

The Fifth consists of three squads of 32 men each. Warren AFB provides stables for the mounts as well as a parade ground for drills.

On call to the Governor of Wyoming, the Fifth serves as his honor guard, takes part in parades and observances.

Last August the Fifth led a wagon train over part of the old Oregon Trail in observing Oregon's 100th anniversary. Riders have also appeared in Veterans Day parades, etc. In January an appearance is slated for the National Western Stock Show and Rodeo in Denver.

Also on the docket is a 1961 trip to Virginia as guests of the National Park Service in a reenactment of the first Battle of Bull Run at Manassas, Va.



OOPS—Bruce Sanford, Astronautics Dept. 556-3, during work days is design draftsman, but after hours he is professional motorcycle race rider, ranked among tops in San Diego County. He has set track records and placed first in road races at Hourglass Field, San Diego, and Paradise Mesa.

Astro Scooter Fan Races Train On San Diego to Wichita Trip

An argument over whether or not a motor scooter can best a train schedule sent Paul A. Funk of Astronautics Dept. 322 on a 1,362-mile journey, solo and almost non-stop, from San Diego to Wichita, Kan.

His 48-hours elapsed time (with only a few hours out for sleep and repairs) didn't beat the train time schedule of 37 hours, but it certainly under-cut the fare. His total cost was $17, averaging 28.3 mph and 62 miles to a gallon of gas.

Only extra equipment was a two-gallon auxiliary gasoline can, a canteen and tools.

On the way home a sand storm near Alamogordo, N. M., fouled his scooter motor and grounded him. Funk returned to San Diego by bus and airline. A student pilot, he later flew a Cessna 172 back to New Mexico, loaded his scooter aboard, and flew home again.

Longest previous scooter ride for Funk was the 10-mile jaunt from his Allied Gardens home to the Astro plant!



CROSS COUNTRY — Paul A. Funk, Astronautics engineering writer, poses aboard his 5 hp Lambretta scooter that took him to Kansas in 48 hours.

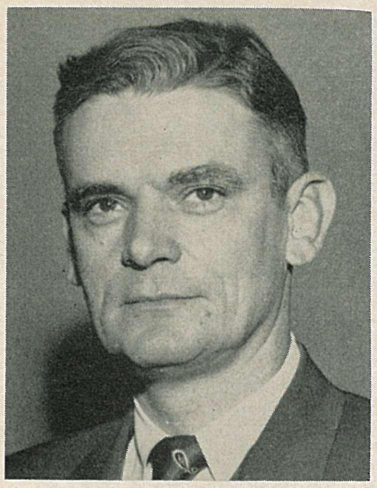


QUEEN'S CHOICE—Carol Lee, daughter of Budge Lee, Dept. 8 at Convair FW, ponders choice of gown to wear as Homecoming Queen of New Mexico Military Institute. Chosen through photo entered in contest by Cadet John Hornburg, Carol reigned for full weekend of festivities.

Sam Hampton at 68 Spryest Sportsman

Fifty-eight members of a deer hunting safari were hard put trying to keep up with the 59th member of their group recently on a trek to Utah.

According to reports, Sam Hampton, a retired Convair SD Dept. 31 man, not only kept up, but also, at times, outdistanced them. In itself this wouldn't be too unusual, but Sam is 68 and the most senior of the group.



Dr. Critchfield

Dr. Critchfield To Head ARPA

Dr. Charles L. Critchfield, director of scientific research for Convair, has been appointed director of the Pentagon's Advanced Research Project Agency, in charge of military space programs.

In effect, Critchfield is "on loan" to the government from Convair. He succeeds Roy W. Johnson, a former General Electric executive.

Noted for his work in nuclear reactions and forces, nuclear theory and stellar energy, Critchfield was professor of physics at University of Minnesota before joining Convair in April, 1955. During the war years he was a group leader at the Los Alamos Scientific Laboratory in New Mexico and later was principal physicist for the Clinton Engineering Works, Manhattan Project, at Oak Ridge, Tenn. Prior to the war he taught physics at Harvard.

RESEARCH SECTION ACTIVATED AT FW UNDER DR. SECREST

Creation of a new research section devoted to the physical sciences of advanced projects, including space exploration, was announced this week at Convair Fort Worth.

Dr. E. Leigh Secrest will head the applied research section, which will be a part of the engineering department. A physicist, he has been active in research and development since 1948.

"The new section will concentrate initially on such topics as the nature of the outer atmosphere, physics of high-energy particles, and astronomical sciences," Secrest explained.

He added that these studies will lead to a better understanding of the environments and conditions which will surround space vehicles.

Such knowledge will be essential for design of vehicles of the type which Convair anticipates for the future, according to Secrest, who recently returned to the Fort Worth plant after a two-year absence.

Electronics Dept. Appointments Made

Three new assignments for support of the newly-created electronics department (Dept. 7) at Convair SD were announced recently by T. J. Sullivan, division assistant manager.

Named to assist R. E. Honer, manager electronics, are C. C. Slaght (Dept. 11), contract coordinator; H. F. Brown (Dept. 15), customer support coordinator; and Frank Packard (Dept. 34), material project coordinator.



BILLY MITCHELL—Brig. Gen. Billy Mitchell, outspoken advocate of air power, is shown with his personal Thomas-Morse MB-3 (Hawk). Photo is about 1920, several years prior to his court martial over constant criticism of military establishment.

Army's Hottest Fighter in Mid-20s Was 170 mph, Thomas-Designed MB-3

(This is installment No. 21 in a continuing history of Convair Division of General Dynamics Corporation. It deals with further exploits of Thomas-Morse Aircraft, which later became a part of Consolidated Aircraft.)

World War II brought a flood of new business to Thomas-Morse Aircraft Corp. of Ithaca, N. Y. To handle the orders that poured in following April, 1916, a reinforced concrete building known as the Hill plant was erected adjoining the Morse Chain Co. plant (principal stockholder of Thomas-Morse). The Inlet plant on Brindley Street was retained for subassembly, and an experimental shop was set up in a former corset factory on Center Street.

B. Douglas Thomas, the firm's chief aircraft designer, produced plans for a fast biplane trainer, the S-4 "Tommy Scout," that won immediate Army approval. By October, 1917, the company had a $1 million backlog including orders for 100 S-4s, at $5,400 each, 12 Navy SH-4B hydros at $7,575 each, and a quantity of Thomas-Morse engines on which procurement prices ranged from $4,200 to $5,274. At peak production in 1918 the Ithaca plants were employing 1,200 workers and three test pilots, and were ordering castor oil engine lubricant in 50-drum lots. The bulk of the business was with the Army Air Service, to which it delivered 597 S-4s.

Next major Thomas success was the MB-3 pursuit plane, a 1918 design that was to reign as the Army's hottest fighter ship through the mid-20s. As a matter of policy adopted early in the war, U.S. fighter squadrons in France were equipped with Allied-made pursuits. The French Spad XIII, a single seater capable of 135 mph, became the standard U.S. fighter. When manufacture of the imported Hispano-Suiza engine was started in this country, Thomas designed a compact biplane to take the 340 h.p. Hispano H motor. After testing four experimental models in March, 1919, the Army gave the MB-3 an amazing official rating of 152 mph. In races it was timed at more than 170 mph.

A production contract for 50 MB-3s was awarded Thomas-Morse in 1919, but a major setback followed the next year — one from which the company never fully recovered. It was known that the Air Service expected to procure 200 additional MB-3s and Thomas-Morse invested in the additional jigs and dies that would be required to fill such an order. The contract was let by open bid, however, and the order was won by the young Boeing Airplane Co. of Seattle. (In Ithaca there was a tendency to credit Maj. Reuben H. Fleet, the Air Service contract officer, for the decision to open bidding to all comers. In negotiating the original order, he had tried vainly to get the price below $13,200. After Fleet became a manufacturer himself and lost a flying boat contract to an underbidding competitor in like circumstances, some of the alumni of the old Ithaca company were wryly reminiscent.)

S-4 Scout, World War I Transition Trainer, Bridged Gap Between Jennies and Spads

When it was introduced in 1917, the Thomas-Morse S-4 was one of the fastest planes in the country and became the standard fighter transition trainer of World War I, bridging the gap between the Curtiss Jenny and the foreign-made Spads and Nieuports that U.S. pilots flew in France. Over 600 were built.

It was put through Army trials in the spring of 1917 at Langley Field and that summer was fitted with pontoons and flown by the Navy.

The biplane was said to have the largest wing stagger of any built to that time. Critics called this a weakness until sand bags weighing 7.4 times as much as the airplane were piled on the upper wing, without structural failure. Specifications were:

Span, 26 feet, 6 inches; height eight feet, one inch; gross weight, 1,373 lbs., empty 940; wing loading 5.8 lbs./sq. ft.; fuselage, wire-strussed spruce and ash members, fabric covered, except aluminum sheet forward of the cockpit, aluminum firewall and engine cowling; landing gear, vee type; power plant, Le Rhone C-9 rotary engine, rated 80 hp (developing approximately 90 hp at 1,300 rpm.); fuel, 30 gallons; lubrication, castor oil (consumption slightly over gallon an hour); speed, 90 mph (with streamline wires, 97), land at 42 mph; climb to 6,900 feet in 10 minutes.

Rotary engines (which revolved around a stationary crankshaft at the same speed as the propeller) about this time were becoming obsolescent. The Gnome, used in the S-4Bs and early S-4Cs was especially vexsome. It was temperamental about starting, consumed more than three gallons of castor oil lubricant an hour, and sometimes threw a fine spray of oil over the right wing and cockpit. When the Gnome was first introduced in France in 1913 it fed a rich fuel mixture into the crankcase through a hollow, fixed crankshaft. There was no throttle. The pilot could make the mixture richer or leaner or slow his speed by cutting the ignition on and off!

However, the Scout itself was as good as any power plant it carried. When fitted with the new 300 hp Hispano-Suiza, an S-4 flying at Ithaca hit a top of 164 mph on Feb. 21, 1919. This compared favorably with the performance of the postwar MB-3 fighter, whose highest recorded speed on a mile course was 177.3 mph.

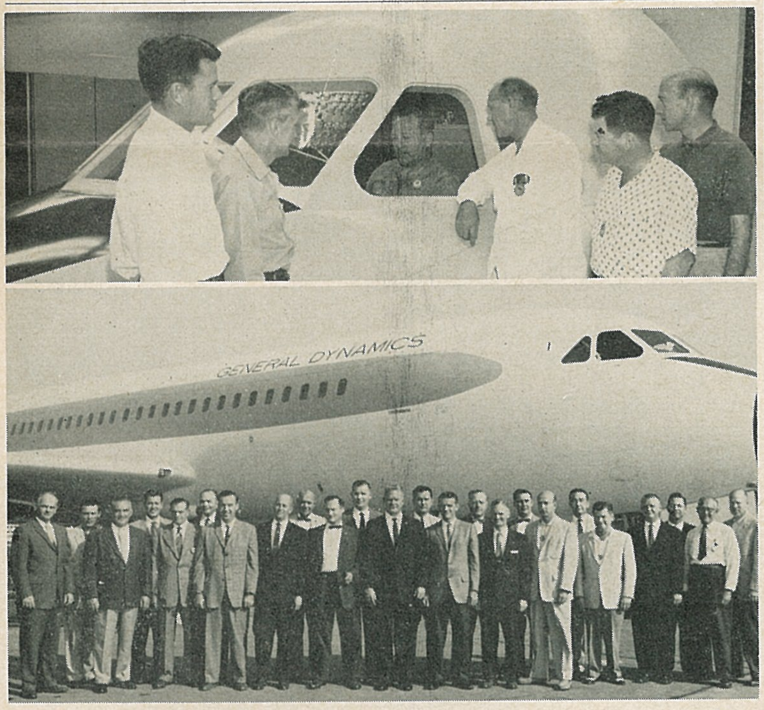
Ralph Monsees Heads Dynapak

Ralph G. Monsees has been appointed manager, special products, and assistant to general counsel in Convair's General Offices, Jack Naish, Convair president, announced last month.

In his new capacity, Monsees will be in charge of Convair Instruments and Convair Dynapak, and will report to the vice president and general counsel.

Monsees joined Convair in 1950 as a patent engineer, and in June of '57 was appointed assistant to general counsel. After serving three years in the Army, attaining the rank of 1st. Lieutenant, Monsees spent four years at Ryan Aeronautical Co.

He was graduated from San Diego State College with a B.S. degree in engineering.



DELTA "GRADUATES"—In upper right, Delta Airlines flight personnel, (from left) J. L. Shannon, G. J. Wells, C. L. Smith, T. S. Bridges, C. P. Kregor, D. B. McNamee, L. W. Higgs, try out 880 cockpit procedures trainer in Convair SD training area. Lower picture shows entire Delta group to take first ground school training course.

More Delta Flight Crews Train At San Diego in 880 Operation

Second group of Delta Airlines flight crews who will be flying Convair 880s arrived at the San Diego plant last week to begin ground school.

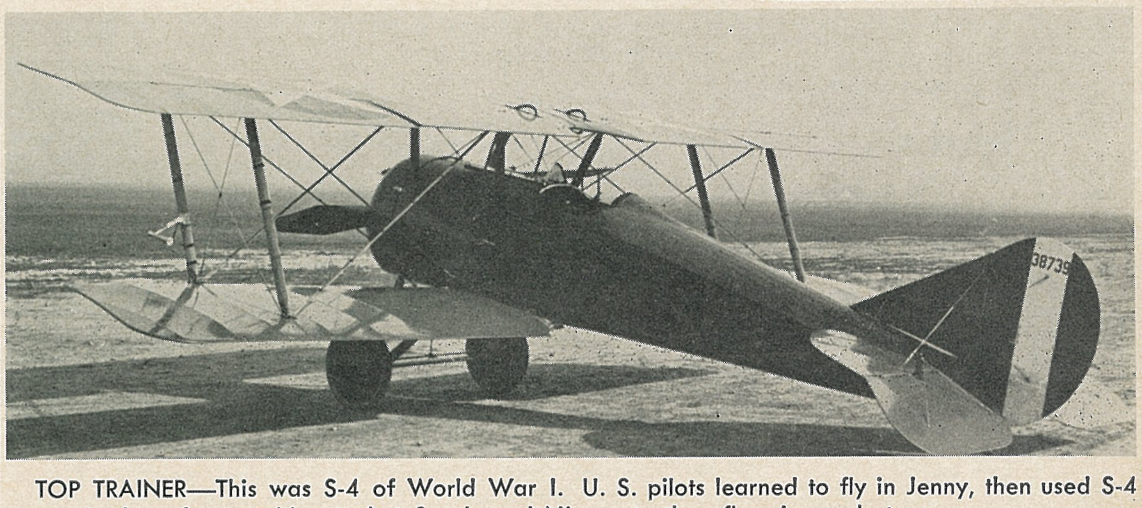
By the close of the three-course training schedule conducted by SD production flight for Delta Airlines, 54 pilots and crew members will receive instruction on 880 aircraft systems, performance, and flight characteristics. Each man also receives 10 hours in the cockpit procedures trainer.

First course ended Oct. 30 and final four-week course for Delta personnel will start Nov. 23 in production flight training area. It will close Dec. 18, according to P. H. Selby, flight training supervisor. Delta Airlines is due to receive its first 880 jet transport in January.

Graduates to date, all from Delta Airlines' headquarters, Atlanta, Ga., are T. S. Bridges, Lewis Brewer, G. J. Wells, W. F. Shillito, D. B. McNamee, C. P. Kregor, E. Laich, C. L. Smith, G. E. Hanson, J. A. Iervolino, J. T. Granfield, L. W. Higgs, J. L. Shannon. T. J. Schlatter, H. F. Cook, J. P. Higdon, J. H. Longino, J. J. Mason, H. F. Hershey, supervisor of technical training; George Griffin, instructor; and two FAA representatives, John Francek and Dick C. Richards.



"He was the cutest bundle of pink when I picked him out for a pet."



TOP TRAINER—This was S-4 of World War I. U. S. pilots learned to fly in Jenny, then used S-4 to ready them for transition to hot Spads and Nieuports they flew in combat.

Five Years Ago...

Following are brief excerpts from Convairiety of five years ago:

★ ★ ★

Convair FW receives Air Force order to build undisclosed number of B-58 supersonic bombers.

★ ★ ★

Convair XFY-1, vertical take-off fighter, achieves horizontal flight.

★ ★ ★

First F-102 wing spare leaves Convair SD, headed for Kelly AFB, San Antonio, Texas.

★ ★ ★

"Bow-leading" version of R3Y Tradewind, the R3Y-2, makes first flight from San Diego Bay.

Coin Club Slates Officer Election

Coin Clubbers at Convair SD are urged to attend the Nov. 17 meeting and vote for new club officers as well as discuss plans for the group's annual Christmas party.

A Thanksgiving turkey will be a prize in a special raffle. Refreshments and entertainment will be provided for the 8 p.m. session in the Hearing Aid Society Bldg., 3843 Herbert St.

Log Book Entries

Service Emblems

SAN DIEGO

The following service emblems are due during the period Nov. 1 through Nov. 15:

Thirty-five year: Dept. 292-3, J. J. Mulroy.

Thirty-year: Dept. 6-53, A. J. Savard.

Twenty-five-year: Dept. 93-0, K. F. Edelmaier.

Twenty-year: Dept. 1-17, K. M. Smith; Dept. 3-7, R. H. Nall; Dept. 6, P. L. Brady, H. M. Ingalls; Dept. 7-40, R. J. Hogue; Dept. 110, Andrew Droden Jr.; Dept. 223, Joseph Arena; Dept. 232, C. J. Dake; Dept. 288, F. R. Roberts; Dept. 292, C. R. Greenwood; Dept. 400, R. W. Peters; Dept. 401, J. T. Frichtel; Dept. 402, W. P. Upham; Dept. 406, D. M. Robinson; Dept. 600-3, S. J. Williams.

Fifteen-year: Dept. 3-1, W. J. Sturges; Dept. 6, R. E. Johnson, John Wegmann Jr.; Dept. 15, Florence H. Barnes, K. P. Busch; Dept. 31, D. A. Dunn; Dept. 109, E. B. Stewart; Dept. 120, Eulah B. Elms; Dept. 160, Wilfred Prevost; Dept. 180, P. J. Caltagirone, W. O. Harper; Dept. 197, J. P. Montijo; Dept. 288-5, Harry Stanford; Dept. 600-1, G. W. Morrow.

Ten-year: Dept. 2, T. J. Sullivan; Dept. 3-3, Esther C. Cornell; Dept. 6, D. R. Carr, R. H. Ridnour; Dept. 15-6, Mary C. Horning; Dept. 21-1, C. D. West; Dept. 31, C. R. Clagett, R. E. Crice, Alphonse Lockwood; Dept. 115, S. G. Handren; Dept. 135, W. C. Chilcoat; Dept. 144, D. C. Dean; Dept. 192, A. A. Broderick Jr., G. J. Needles; Dept. 216, Opal P. Nickell; Dept. 600, Ora F. Carpenter.

Promotions

SAN DIEGO

Promotions to or within supervision effective Oct. 26.

Dept. 7, Electronics: To manager of electronics, R. E. Honer. To chief electronics project engineer, W. L. Boyce. To customer requirements engineer, W. R. Rauth.

Dept. 91-0, General Accounting: To accounting asst. supervisor, H. E. Wall.

Dept. 97-5, Data Processing: To tabulating supervisor, C. E. Garner.

Personals

SAN DIEGO

I wish to express my sincere appreciation for all the kindness and sympathy shown by our Convair San Diego friends at the death of my husband, Leo Kaldeck, Dept. 6.

Mrs. Leo Kaldeck

* * *

With grateful appreciation to Model 8 field operations employees, and other Convair friends, for their generous assistance, beautiful flowers and other expressions of sympathy when we lost our wife and mother.

L. E. Rulik Jr., Dept. 288-6
Boots and Terry Rulik

Retirements

SAN DIEGO

ANDERSON—Walter T., Dept. 280. Seniority date Nov. 1, 1950, retirement effective Oct. 30, 1959.

CRAWFORD—Thomas A., Dept. 3-1. Seniority date March 18, 1952, retirement effective Sept. 25, 1959.

DANIELS—Hillary G., Dept. 115. Seniority date Oct. 30, 1950, retirement effective Oct. 23, 1959.

HOWARD—Ethel M., Dept. 44. Seniority date May 21, 1952, retirement effective Oct. 30, 1959.

Births

SAN DIEGO

BUTLER—Son, Steven Doyle, 8 lbs., 1 oz., born Sept. 19 to Mr. and Mrs. M. R. Butler.

FORMAN—Son, Timothy David, 6 lbs., 14½ oz., born Oct. 23 to Mr. and Mrs. C. W. Forman, Dept. 403.

QUIGLEY—Son, Warren Robert, 7 lbs., 6 oz., born Aug. 19 to Mr. and Mrs. A. J. Quigley, Dept. 6.

WILCKEN—Son, Daniel John, 7 lbs., 8 oz., born Oct. 10 to Mr. and Mrs. S. E. Wilcken, Dept. 6-51. Mother, Mary Wilcken, formerly Dept. 197-1.

Deaths

SAN DIEGO

HAWK—Elmer W., Dept. 25. Died Oct. 23. Survived by father, four brothers, one sister.

Turkey Shoot Set By SD Pistol Club

Pistol Clubbers at Convair SD sharpened up for their annual turkey shoot scheduled for Nov. 22 at 9 a.m. at the San Diego Police Range with some impressive scoring at their last club shoot.

Club record setter, Joe Williamson (Dept. 401), came close to a perfect 300 score Oct. 25 when he tallied 297 points to win the master class. Williamson, however, found himself in second place after the short national competition, four points shy of the 286 total posted by B. L. Broadway (Dept. 603).

In other brackets, Ralph Picard (Dept. 7) topped the expert class with 270 points. Harvey Ingalls (Dept. 6) led sharpshooter scoring with 217.

LOCKHEED MANAGER TO ADDRESS AIIE

Monthly meeting of the American Institute of Industrial Engineers will be held tomorrow evening (Nov. 12) at the Admiral Kidd Officer's Club on Harbor Drive.

Featured speaker will be the national president of the AIIE, F. J. Johnson, who is manager of production engineering for the Lockheed Aircraft Corporation, Marietta, Ga.

Guests are welcome to attend the meeting which starts with social hour followed by a 7 p.m. dinner. Reservations can be placed by calling F. J. Wintersdorff, ext. 356, SD Plant 2, or Tom McColloch, ext. 1261, Astro.

25 SD Women Sign For Charm Course

Twenty-five Convair SD women tonight (Nov. 11) will start a six-week advanced charm school course sponsored by CRA, Martha Woodberry, commissioner of women's activities, reports.

The instruction is handled on a personalized basis, with individual attention for each student Mrs. Edith Antelline, instructor, tutors students on figure correction, posture, walking, modeling technique, makeup, hair-styling, voice improvement, etc.

Classes will be held two hours 7-9 p.m., each Wednesday evening in the House of Hospitality, Balboa Park.

Alumni of Brooklyn Poly Gather at SD

Half of those meeting recently to form an alumni group of Brooklyn Polytechnic Institute, N.Y., turned out to be Convair Astro and SD men.

Getting together at the initial meeting Oct. 31 were Hal Robinson, SD aerodynamics; Jerry Fleichner, Astro digital computing; Jim Heffron of Astro Dept. 541-5; Bob Leffler, SD dynamics lab; Larry Kamm, Astro predesign; and George Buckle, SD dynamics, former BPI professor.

Other alumni of the school within Convair are urged to contact Kamm at AC-2-8146.

'Rockets Evolution' Subject of Address

F. A. Ford of the Astronautics preliminary design section will speak on the "Evolution of Rockets" at a special "Meet the Scientist" lecture Nov. 18.

The 7:30 p.m. gathering will be at the National City Junior high school.

This is one of a monthly series of lectures. George Mealey, chief of preliminary design at Astro, addressed a similar group Oct. 21, discussing "Space Communication."

CONVAIR SD BRIDE WEDS ATTORNEY

Jackie Smithwick of Convair SD Dept. 15-3 was married Oct. 29 to F. James Bear, National City attorney. The couple will make their home in Chula Vista.

Two Nights For Skaters

Special arrangements involving CRA at Astronautics and San Diego Divisions have made it possible for ice skaters from both groups to enjoy their pastime on two nights instead of one.

Astro skaters have been enjoying private sessions at Iceland, 6055 Lake Murray Blvd., each Tuesday, while San Diego skaters have been scheduled Thursday. Now skaters from either division may take part in both Tuesday and Thursday sessions between 6:30 and 8 p.m. with an option to remain until 10 p.m. at no extra charge.

Audrey Ericson, Iceland professional, offers advanced instruction from 6:30 until 6:45 p.m. and beginners' instruction from 6:45 until 7 p.m.

Membership cards are available at the rink each night. In time, they will be required for admission, although Convair "ID" cards are now being honored.

Rockhounds Plan Jaunt

Rockhounds from San Diego and Astronautics Divisions will gather at 7:30 p.m. tomorrow (Nov. 12) at the new CRA Clubhouse west of Gillespie Field, El Cajon.

Plans will be laid for a field trip Nov. 14 to the Pinto Mountains south of Mexicali, Mexico, sponsored by the San Diego Gem and Mineral Society and Calexico Chamber of Commerce.

Members will gather at the De Anza Hotel in Calexico at 8:30 a.m.

Information on the trip is available by calling Fred Schulz, ext. 3062, Astro.

Archers Slate Turkey Shoot

Archers from Convair SD and Astro will compete for turkeys at the annual Thanksgiving shoot to be held this Sunday (Nov. 15) at the Singing Hills Range.

Ten birds will be given as prizes. Competition starts at 10 a.m. following a short registration period. Those taking part in the 28-field-target morning round will be eligible to compete in the afternoon novelty shoot.

Next joint meeting for SD and Astro archers is scheduled for Nov. 19 at the CRA Clubhouse on Pacific Hwy. at 7:30 p.m.

J. B. Bence, club spokesman, reminds members that in addition to the Convair turkey shoot a similar event will be sponsored Nov. 22 by the Southern Border Archery Association.

Bill Jack Named Warren News Rep.

WARREN AFB — William M. "Bill" Jack Jr. has taken over as **Convairiety** news contact for Astronautics news stories here.

Jack is located in the contracts and communication office and may be reached at ext. 7-2254. He will transmit all stories about Convair people and events to San Diego.

SWEEPS SLATED FOR TORREY PINES LINKS

Beginning Monday (Nov. 16) starting times may be reserved for Astro CRA's annual turkey sweepstakes to be staged at the Torrey Pines course Dec. 5 and 6. Deadline for entering is Nov. 28. Elaine at ext. 1111 will accept starting times.

Monday Meetings For Toastmasters

Convair Toastmasters Club #457, open to both San Diego and Astro men, is meeting every Monday night this month at the Astro dining room. Guests or new members are welcome to the 6 p.m. dinner metings. For information contact Andrew Gormish, ext. 1636, SD Plant 1.



CAD!—Dick Wagstaff (SD Dept. 280) threatens nasty villain, Ernie Stafford (Dept. 288), in rehearsal for new melodrama. Director is Harold Huse (SD Dept. 280). The play: "Egads What a Cad."

'Drunkard' Ends Long Run But SD Actors Continue Tradition of Mellerdramer

"The Drunkard," famous melodrama that enjoyed a record-breaking 26-year run in Los Angeles' Theater Mart, last month closed from near exhaustion and pressure of the fire department.

But mellerdramers ain't dead by any means.

With Convair SD folk in some of the leading roles, "He Done Her Wrong" has been hissed and cheered for nearly three years at the Ol' Opry House at Meadowlark Ranch on Rancho Santa Fe Road.

Patterned after the LA Theater Mart, customers sit a tables, drink beer, crunch pretzels, and exercise their vocal chords as the villains arouse their ire.

Harold Huse (Dept. 280), who has been active in San Diego Little Theater work for 12 years, is director of the next Nor San Players offering, "Egads What a Cad," which includes in leading roles two Convair SD men, Ernie Stafford (Dept. 288) and Dick Wagstaff (Dept. 280).

Sandwiched in between acts of the melodrama are "oleo" acts—song, dance and other vaudeville routines to keep customers entertained.

"Egads What a Cad" and "He Done Her Wrong" will run on alternate weekends at the Ol' Opry House. How long? "We have only 23 years to go to equal that Los Angeles record," Huse asserts.

Thanksgiving Menu Slated At SD, Astro

Two Thanksgiving dinners are in the offing for most Convair San Diego and Astronautics people.

Besides their own family celebrations, they will be served a Thanksgiving dinner at all SD and Astro cafeterias the day before Thanksgiving, on Wednesday (Nov. 25).

Virginia baked ham will be the entree at this year's special holiday dinner, said W. E. Rickman, supervisor of Prophet Co. cafeterias in Convair divisions. Entire dinner, including dessert and drink, will be $1, including tax.

On the menu will be candied yams or whipped potatoes, fresh peas, tossed green salad, hot rolls and butter, coffee, tea, or iced drink, (milk will be five cents extra), pumpkin or mince pie.

The Thanksgiving special dinner will be served during the noon lunch periods at all San Diego Plant 1, Plant 2 and Astronautics cafeterias.

Saturday Schedule For Shotgun Range

Shotgun range at Gillespie Field will be reopened by the CRA Gun Club for Saturday afternoon use beginning this week (Nov. 14).

Convair SD and Astronautics enthusiasts may practice shooting, either trap or skeet, any Saturday after 2 p.m., said R. J. Tarver, range director. Beginners and novices are welcome to use the range during the Saturday open hours and Tarver will be available at all times to give individual help and instruction.

Saturday afternoon hours at the CRA gun range had been discontinued during the summer months when the longer daylight hours permitted use of the range on Wednesday evenings. The present schedule will be maintained as long as attendance warrants it, said Tarver. Anyone wishing further information may call him at HI-4-1022.

Flying Hills Next Golf Club Tourney

Entries are now being taken for the Convair Golf Club's turkey sweepstakes Nov. 21-22 at Flying Hills. Last day for entries is Nov. 18.

San Diego golfers can register with Alma, ext. 218, Plant 2; Astro linksmen should call Hal Purnell, ext. 1313, Astro.

Sports Car 'Drags' At Hourglass Field

Convair SD and Astro Sports Car Clubs will join forces to sponsor "Snail Drags" Nov. 22 at Hourglass Field.

Any Convair SD or Astro folk interested in the competition are invited to participate. A technical inspection will be held at 9 a.m.; trials at 10 a.m.; and elimination runs at 2 p.m.

Classes will be set up. The competition is for stock models, and appreciable differences will move entries to the next larger displacement class.

Gun Clubbers Plan Turkey Tournament

Gun Clubbers from SD and Astronautics will set their sights on winning Thanksgiving merchandise awards at a two-day shoot Nov. 21-22 at the CRA Range, Gillespie Field.

Saturday (Nov. 21) competition will start at 2 p.m.; Sunday shooting starts at 9 a.m. and will progress through the day. Events will include skeet, trap and rifle with contestants vying for turkeys, bacon and merchandise certificates.

In addition to regular 16-yd. events, other novelty categories will be held including "two misses and out" and "ske-trap." Prizes will be awarded winners in each group.

FIVE CONVAIR MEN ENTER ROAD RACE

At least five Convair men from the San Diego area will compete in the Sport Car Clubs of America Pacific Coast Championship road races this weekend.

The annual event is slated for Hourglass Field off Highway 395 Saturday (Nov. 14) and Sunday.

Three Astro men are entered. Bruce Augustus will drive an Alfa Romeo; Roscoe Anderson, a Sprite; and Ed Ericson, a Porsche.

Don Maslin in a Lotus and Dick Elms driving a MGA will represent San Diego Division.

SD Baseball Team Is League Leader In Top City Loop

So far seven is the lucky number for Convair SD's baseball team entered in the top San Diego City league.

The local hardballers started the season with a rush, bouncing the MCRD Bulldogs 7-2, and clipping the Cardinals 7-4. The wins give Convair a tie for first place in early season standings. Only other league team to chalk up two victories thus far is Ryan.

Bill Murphy (Dept. 192) and Eddie Moraga, team manager, carried the brunt of the pitching chores during the first two games. Murphy went the distance and twirled a 4-hitter against the Marine team. He was bailed out in the third inning of the second game by Moraga, who went the next six innings, allowing only two hits.

Next Convair SD game is scheduled for Nov. 15 with the Lemon Grove Merchants at the Helix High School field. On Nov. 22 they clash with Ryan at Golden Hill playground. All games start at 1:45 p.m.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY—Turkey shoot 10 a.m. at Singing Hills Range this Sunday (Nov. 15). Next meeting Nov. 19 at CRA Clubhouse on Pacific Hwy. at 7:30 p.m.

BADMINTON—Open play for families Tuesday evenings at 7:30 p.m. in Balboa Park Federal Bldg.

BASEBALL — Convair plays Lemon Grove Merchants Nov. 15 at Helix field and Ryan Nov. 22 at Golden Hill. Games start at 1:45 p.m.

BRIDGE CLUB—Master point night at session Nov. 17, 7:30 p.m., Hotel Barcelona, 4th and Juniper.

BASKETBALL—Players needed for girls' team; contact Jean Todd, ext. 1017, Plant 1.

CAMERA CLUB—Meeting and color slide competition. Nov. 23, 7:30 p.m., Photo Arts Bldg., Balboa Park.

CHORALAIRES — Concert in Pomona 8 p.m. on Nov. 21, Claremont High School auditorium, corner of Foothill Blvd. and Berkley. Rehearsals each Monday evening at 7:30 p.m. in CRA Clubhouse on Pacific Hwy.

COIN CLUB — Meeting Nov. 17, 8 p.m., Hearing Aid Society, 3843 Herbert St.

GOLF — Convair Golf Club sweeps Nov. 21-22 at Flying Hills. For reservations, contact Alma, ext. 218, Plant 2.

GUN CLUB — Thanksgiving merchandise shoot Nov. 21 (starting at 2 p.m.) and Nov. 22 (starting at 9 a.m.) at CRA Range, Gillespie Field.

ICE SKATING—Convair night every Tuesday and Thursday; discount rates between 6:30 and 8 p.m. at Iceland, 6055 Lake Murray Blvd.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admissions: adults, 25¢ children, 15¢.

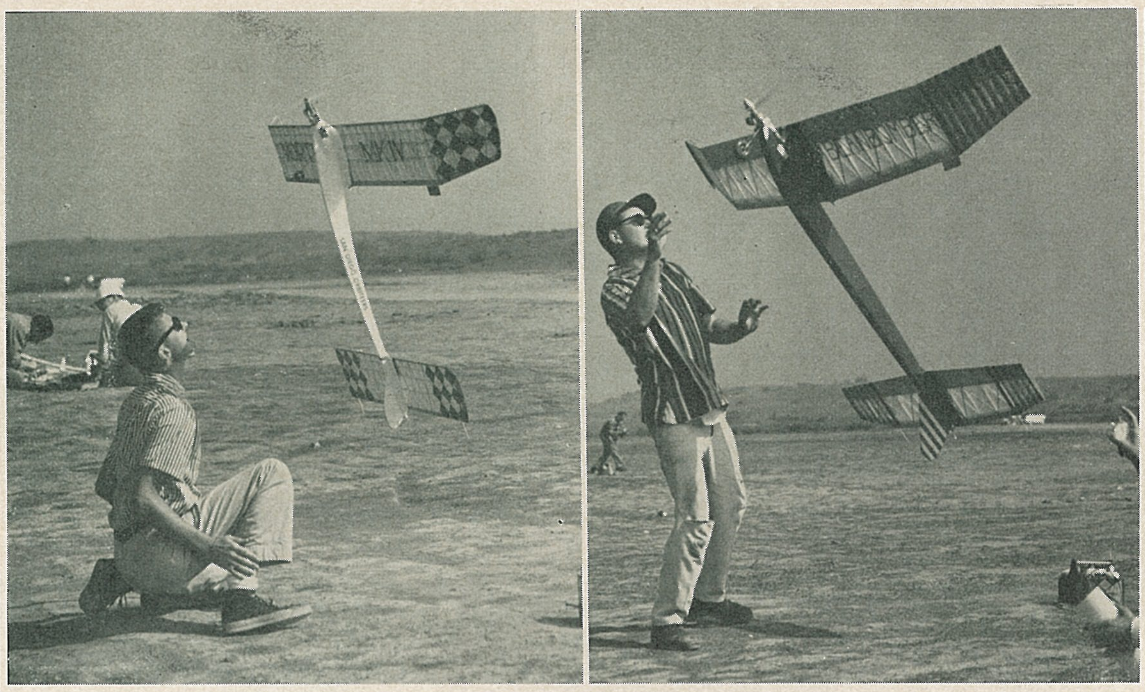
PISTOL CLUB—Turkey shoot Nov. 22 at 9 a.m., San Diego Police Range.

RADIO CLUB — Meeting tomorrow (Nov. 12), 7:30 p.m., Harbor Drive headquarters.

ROCKHOUNDS — Meeting tomorrow (Nov. 12), 7:30 p.m., CRA Clubhouse, Gillespie Field. Field trip Nov. 14 to Pinto Mountains near Mexicali. Group meets in De Anza Hotel in Calexico at 8:30 a.m.

ROLLER SKATING — Skate night Monday (Nov. 16) at Skateland, Front and G Sts., 6:30 to 9 p.m. Free tickets at employee services, both plants, and from departmental representatives.

SKI CLUB—Meeting and fashion show Nov. 18, 8 p.m., House of Hospitality, Balboa Park.



TREADING AIR—Denny Davis (left) and Nat Antonioli were only two Convair SD contestants to place in CRA Aeromodelers competition last month at Clairemont Mesa field. Davis placed fourth in Class B; Antonioli landed in fifth in Class A.

CRA Sports & Recreation Convairiety

31 Enter Aeromodeler Contest; Nat Antonioli Wins Club Award

A free flight gas contest sponsored by CRA's Aeromodelers Oct. 18 at Clairemont-Mesa field attracted 31 entries to make it one of the largest competitions ever staged by the group.

Gary Witt, club spokesman, said many of the entries were from the Los Angeles area. Prizes were merchandise awards and trophies.

Top-ranked Convair SD contestant, Denny Davis, placed fourth in Class B. Nat Antonioli landed in fifth in Class A. Among the club's also-rans were Charles Primbs, Warren Curtis and Witt.

Preparations are already being made for a scale contest to be held next Feb. 6-7. Models eligible must be gas-powered, and miniatures of real man-carrying heavier-than-air aircraft. Witt said models will be judged the evening of Feb. 6. Flying will start the next morning. Walt Mooney (Dept. 6) is in charge of organizing the contest.

★ ★ ★

Nat Antonioli (Dept. 6) is winner of the "Aeromodeler of the Year" award, based on total points accumulated in club competitions during the past year.

To win the club's annual award, consisting of trophy and pen and calendar set, he piled up 58.2 points, besting the runner-up by more than eight points. Points are awarded for participation in club activities plus flying time accumulated during the contest year.

In addition to his performance with the CRA Aeromodelers, Antonioli is secretary of another San Diego model club and was a team member of the Aeromodeler group that placed fifth in the Nordic towline event at the national model contest at Los Alamitos earlier this year.

Keglers Start In Ninth Week

Most winter bowling leagues are near the nine-week mark as Convair SD keg activities move into full stride. Following are season honor roll standings thus far:

LEMON GROVE 675

High Individual Game, High Individual Series, S. Jones, 232, 611; High Team Game, High Team Series, Who No's, 784, 2268; High Women's Game, High Women's Series, Edie Bingham, 176, 476.

JET LINER 700

HIG, HIS, P. Anderson, 234, 594; HTG, HTS, Ridge Runners, 910, 2400; HWG, HWS, Jean Danzl, 216, 569.

MIXED SCRATCH 760

HIG, J. Monsegur, 245; HIS, P. Wayman, 593; HTG, L's A Poppin, 857; HTS, Model Shop, 2452; HWG, Clarice Aus, R. Jones, 208; HWS, Helen Belland, 515.

WHIRLAWAY 725

HIG, S. Parret, 253; HIS, E. Shaw, 609; HTG, HTS, Strikers, 872, 2493; HWG, HWS, Mary Black, 204, 531.

MIXED MASTERS 700

HIG, P. Carlton, 238; HIS, L. Forest, 615; HTG, 880's and Woodchoppers, 813; HTS, Woodchoppers, 2370; HWG, HWS, Edith Hood, 211, 513.

CRA ENGINEERING

HIG, Bill Chapman, Roger Wagner, 257; HIS, Roger Wagner, 644; HTG, Odballs, 977; HTS, Prods, 2700; high averages, Ray Schulte, Roger Wagner, 184.

ENGINEERING MIXED

HIG, HIS, Refugio Parga, 248, 676; HTG, Interceptors, 853; HTS, Con Men No. 2, 2475; HWG, Ellie Hall, 223; HWS, Carlie Benson, 647.

Newcomers Invited To Ski Club Show

Latest styles in ski apparel and new skiing equipment will be displayed at a fashion show sponsored by the Convair SD Snow Ski Club Nov. 18 in the Balboa Park House of Hospitality.

The show will be held in conjunction with a regular club meeting at 8 p.m. Joe Harris, CRA commissioner, invited any interested Convair SD folk to attend.

Regular members and newcomers will be able to sign up for the club's first scheduled ski trip of the year at the meeting. A jaunt to Mammoth Mountain is planned for Dec. 5-6.

Three Win Honors In Camera Club's Quarterly Contest

Four awards were made at the CRA Camera Club's third quarterly contest judged by Ray Smith, member of the "Darkroomers" Club, and judge for the annual photo exhibit at the Del Mar Fair.

Two club members were double winners. Clarence Schultz (Dept. 201) won two of the color awards, and Ron Ainsworth (Dept. 6) placed winners in both color and black and white categories. Mrs. Ainsworth rounded out the winning circle with a first-place color entry.

Next club meeting will be held Nov. 23 at 7:30 p.m. in the Photo Arts Bldg., Balboa Park. Top color slides taken by members during the year will be judged and winners selected. Each member is asked to bring six slides to enter in the competition.

Future club activities will also be planned at the meeting and attendance of all members is requested. Those unable to attend are asked to contact Ron Ainsworth, BR-6-0694, between 5 and 7 p.m., any evening before the meeting.

Choralaires Slate Pomona Appearance With Missilemen

Choralaires, Convair SD's mixed choral group, will make their first appearance of the season Nov. 21 in Pomona, sharing the stage with the Convair Pomona Missilemen.

The concert will start at 8 p.m. in the auditorium of Claremont High School, corner of Foothill Blvd. and Berkley.

The engagement marks the second occasion that the two groups share the same stage.

W. A. Vogel, Choralaires' director, said the group will journey by chartered bus to Pomona and spend part of the afternoon rehearsing with the Missilemen. They will return the same night.

Tickets Discounted For 'Big Fisherman'

Discount tickets for the Nov. 28 showing of "The Big Fisherman" at the Capri Theater at 8 p.m. are still available at Convair SD employee services, Plants 1 and 2.

The film depicts the life of Simon Peter and stars Howard Keel. With discount, general admission seats cost $1.40, loges $1.60. Regular prices are $1.75 and $2.00.

Girls' Hoop Squad Still Needs Players

More players are needed for Convair SD's girls' basketball team.

Any girls with a smattering of hoop experience are invited to join the squad, according to Jean Todd, team manager.

The girls are scheduled to play in a pre-season tourney the latter part of November, and newcomers will have almost two weeks to practice with the team. Regular league play will start in January.

Because of difficulties in getting gym reservations in advance they practice at various times and locations. Gals interested in joining, or desiring more information, should call Jean, ext. 1017, Plant 1.

Four Pilots Win Elsinore Honors To Pace Entries

Four Convair SD glider pilots took honors at the Elsinore Fall Soaring Contest Oct. 17-18 and Oct. 31-Nov. 1, posting most wins for representatives from a single club.

Leading the parade of SD competitors was John Williams (Dept. 7) who flew his Schweitzer 123 sailplane into second place in overall meet standings. Oddly enough, for his second-place finish, Williams won the only prize contributed by Convair—a variometer.

DeVaughn North (AF office) piloted his plane into first in the two-place division. Another first, in the team competition, was chalked up by Gene Wigham, Sterling Starr (both SD) and George Tweed (Astro).

Some 20 pilots participated in the meet, including representatives from Convair Pomona and Antelope Valley. The Antelope Valley contingent placed first in the club competition and Dave MacNay of Pomona ranked third in the overall standings.

Win Rally Honors

Convair SD Sports Car Club members drove off with first and third place in the "El Liebre" rally Oct. 25 sponsored by the San Diego Sports Car Club.

Peter Aperlo and Tommy Jackson finished first and Don Hall and Jim Brickson placed third.



HOUSE OF CARDS—Convair SD Bridge Club sessions at Hotel Barcelona, 4th and Juniper, attract loyal following first and third Tuesdays of the month. Intent group above was among those at play last month. Below, Bridge Clubbers "gag it up" with king-size cards and perfect hands. From left: Jim Svoboda (Dept. 231), Billie Jean Chadwick (Dept. 6), Burton Grindstaff (Dept. 15), and Walt Baumgartner (Dept. 8).



CANDID—When Frank Pace Jr., chairman of General Dynamics Corporation Board of Directors, spoke before Management Club at Convair Fort Worth, enterprising photographer Dick Magness snapped this series of candid photos. Pace is skillful public speaker and pictures reflect his poised delivery.

Speed Capsules (Anti-Shock Bodies) Designed For Wings of Convair 600

Production plaster mockups of speed capsules for the Convair 600 jet transport have been completed at Convair SD to establish exact shape of the revolutionary devices which will permit the plane to fly smoothly at almost the speed of sound.

The capsules will help the 600 streak through the skies at 635 mph.

Engineers who designed the new devices have designated them more formally as "aerodynamic anti-shock bodies." They roughly resemble upside down canoes, pointed at each end and flat on the underside. Two are attached to upper surfaces of each of the swept wings. All four extend back of the wing trailing edge.

The devices resulted from studies by Convair engineers and by researchers of the National Advisory Committee for Aeronautics (NACA).

It was found that when the Convair 600 flies at high subsonic speeds the air passing over the wings actually will be moving at a supersonic rate. The 600 will have a maximum cruise speed of Mach .91 or 91 per cent of the speed of sound.

Tunnel tests showed this supersonic airflow had a tendency to build up a compression wave or shock wave on the wing. The shock wave creates drag and slows the speed of the airplane. Wind tunnel experiments indicated that when a shape such as the Convair 600's speed capsule was attached to the wing it straightened the airflow and reduced the drag. Additional wind tunnel studies led to the adoption of four, two on each wing.

Once the decision had been made to utilize speed capsules it led to a further step—use of much of the space within as additional fuel tanks.

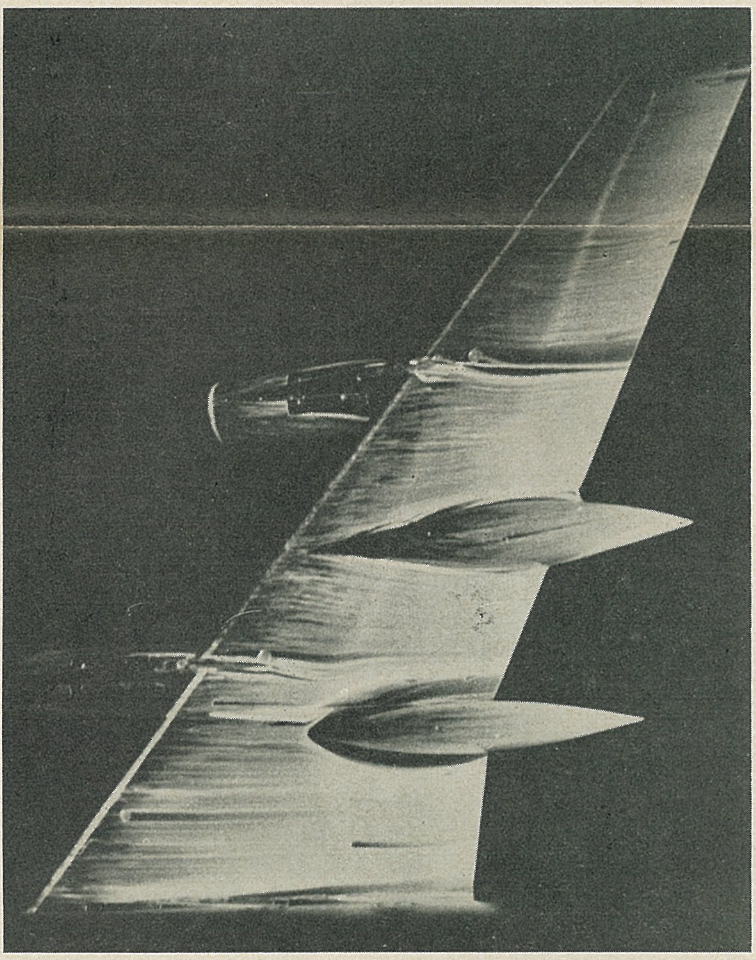
The wing of the Convair 600 is an integral fuel tank—a tank created by the structural members themselves, with no interior tank inside the structure. The same is true of the speed capsules. Like the basic wing structure itself, the speed capsules will not only be riveted but will go through the Scotchweld adhesive bonding process in Convairs' giant electric oven to create leak-proof, maintenance-free fuel tanks.

The two inboard speed capsules are located just inside of the inboard engine pods. They measure 22 feet, 10 inches in length and 40 inches at the widest diameter. They each hold approximately 300 gallons of fuel and extend 7½ feet behind the wing's trailing edge. The forward 53 inches of the capsule remains empty. The tank area extends 12 inches aft of the wing trailing edge and the remainder is empty. The final 6 feet, 8 inches of the capsule can be removed for access to the tank area.

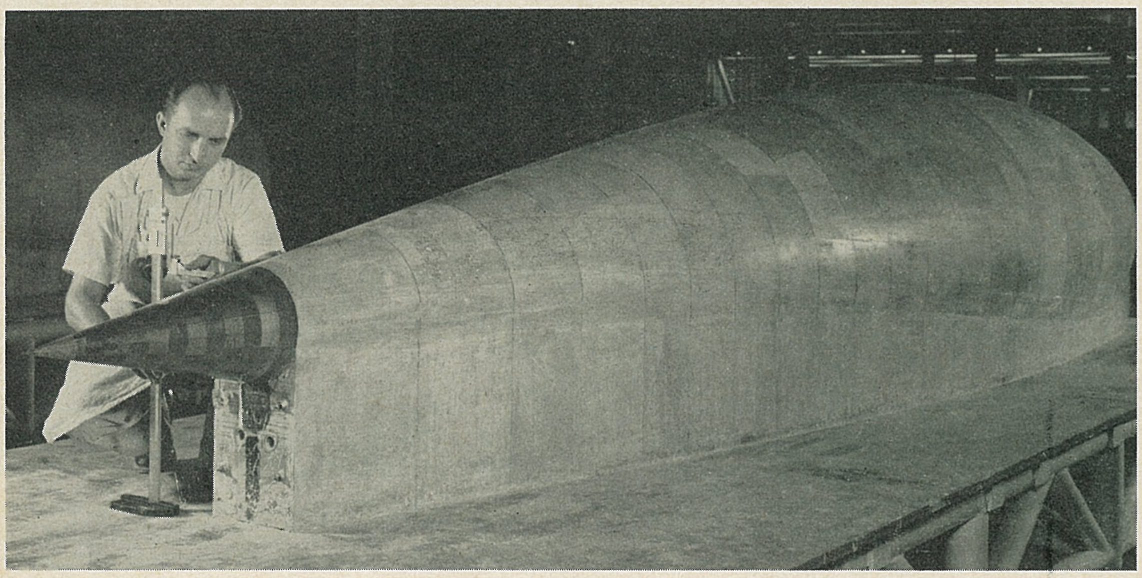
The two outboard speed capsules are slightly larger. However, to achieve proper weight distribution they will hold somewhat less fuel—218 gallons each. They are 24 feet, 6 inches long, and 51 inches across at widest diameter. They extend 11 feet aft of the wing trailing edge. The forward 40 inches contains no fuel. The removable tail cone is 5 feet, 4 inches long.

Production of major subassemblies for the Convair 600 has begun at San Diego. The first 600 will roll from the factory in July and fly in September of next year. Airline deliveries start in the spring of 1961.

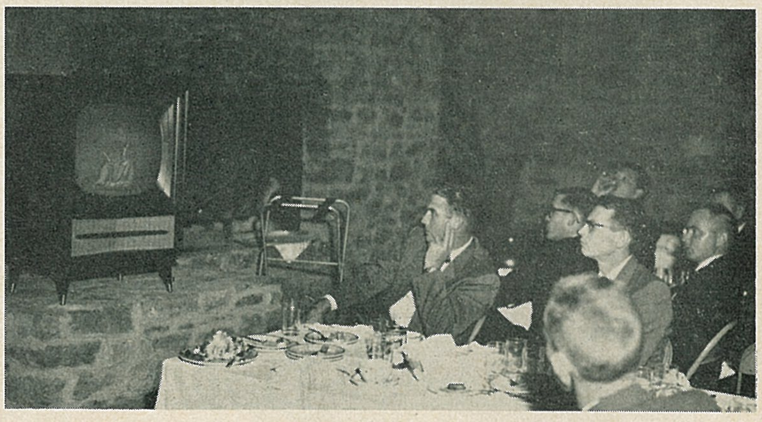
The Convair 600 will be powered by four General Electric aft fan jet engines. American Airlines has ordered 25. Swissair and Scandinavian Airlines System have ordered nine.



SMOOTH AIR—Photograph of Convair 600 wind tunnel model shows how air flow is smoothed by canoe-shaped capsules on upper wing surface. Shock wave, with resultant drag, is eliminated. Capsules also are used for additional fuel storage.



SPEED CAPSULE—M. J. Hladky, Convair SD (Dept. 406-3) second-shift, uses height gauge to establish station lines on production plaster mockup for Convair 600 inboard speed capsule which helps make plane world's faster airliner. Inboard capsules are 22 feet, 10 inches long and 40 inches at widest diameter. Outboard capsules are slightly larger.



RAPT ATTENTION—Part of audience heard Frank Pace Jr. by "remote control." All of overflow crowd could not be accommodated in same room as speaker, so some dined in other rooms and heard and saw Pace via closed circuit TV.

Escape Capsule For B-58 Gets Close AF Scrutiny

The B-58 Hustler escape capsule was the subject of an intensive three-day inspection recently, attended by Air Force, North American, Convair and Stanley Aviation (sub-contractor for the capsule) personnel.

One in a series of development engineering inspections, the meeting opened Nov. 2 with all-day presentations by Convair and Stanley at Convair Fort Worth.

In addition to information on capsule configuration, sessions dealt with preliminary and post-ejection functions, and ground support equipment handbooks for the capsule.

Remainder of the inspection was devoted to studying capsule mockups.

The metal mockup of the pilot's capsule was functional. Members of inspection teams, many donning flight uniforms, "tried the capsule on for size," closing it to get the feel of being confined inside.

A non-functional crew capsule, interchangeable in the second and third crew members' stations, was shown in the metal mockup area. It was used to demonstrate capsule removal and installation.

A non-functional pilot's capsule in the wooden mockup demonstrated visibility suitable for fly-down when cockpit lights are on.

A miniature model of a flotation capsule was on display in a tank of water.

Early Delivery Sought For B-58 Hustler No. 31

As Air Force acceptance flights on B-58 Hustler No. 31 move rapidly toward completion, Convair Fort Worth eyed an early delivery for this first tactical Mach 2 bomber.

Acceptance flights, when completed, will give the go-ahead signal for putting the production model B-58 into AF hands.

Air Force quality control inspections are virtually complete. Results prove No. 31 is the cleanest B-58 so far. "Just about perfect," according to W. L. Daniel Jr., general foreman in B-58 production field operations.

Meanwhile, three shifts work round-the-clock to smooth routine rough spots on the road to delivery.

Day crew chief is C. N. White. B. R. Plumlee is second shift chief and G. E. Nelson is chief of third shift crew.

Dept. 75 (electronics) assistant foremen working with airplane No. 31 are T. R. Groce, days; D. L. Campbell, second shift; and W. Keith, third.

Piloting Air Force acceptance flights is Maj. Joe B. Thomson Jr. with Capt. Andrew Z. Doka as navigator. Defense systems operator is Capt. Robert S. Ballard.

Air Force Teams Carefully Scrutinize B-58s; Suggested Changes Are Relatively Minor

B-58 Hustlers No. 31 and 33 were inspected minutely recently by Air Force teams during the first of a series of three "qualification maintainability inspections."

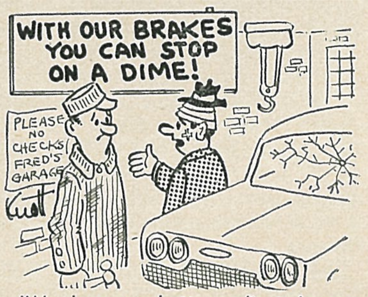
All systems other than electronics were visually "combed" to determine performance in accordance with specifications.

"There will be no delay in delivery or flight because of these inspections," said E. R. Weiher, chief of process control. "The changes suggested as a result of this three-day inspection session were relatively small and few in number."

The next inspection will be on airplane No. 35. January is the tentative date for the final "QMI."

Inspectors, representatives of various Air Force agencies, also reviewed and approved a selected group of ground support equipment.

Inspections were made by individual teams headed by Air Force officers who reported to QMI Board Chairman Col. Audrin R. Walker and Col. D. D. Hutchins, official recorders for the board.



"Maybe you better adjust 'em so they'll stop on a dollar."

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

Convairiety

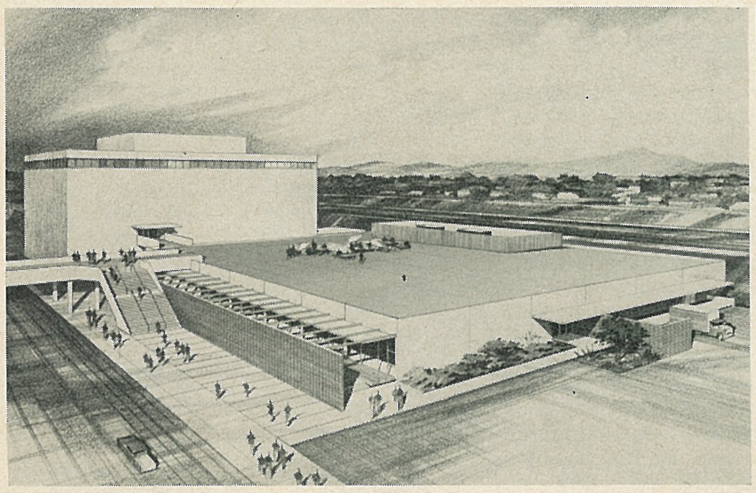
San Diego EDITION

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SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



FOR THE FUTURE—New cafeteria building for Plant I will be close to Bldg. 19, with "upper deck" accessible from overpass. Roof will be equipped for outdoor eating.

Construction Starts Soon on Cafeteria Adjacent to Bldg. 19

Ground will be broken next month for a new cafeteria building at Convair SD Plant 1.

It will replace the World War II vintage cafeteria now in use on Pacific Highway immediately south of Bldg. 19. Completion is expected by mid-summer, B. F. Coggan, Convair SD manager, said.

Food service will continue at the present location until the new food center is in operation.

The new concrete slab structure will be erected close to the south wall of Bldg. 19. It will house complete kitchen and food preparation facilities and have a total seating capacity of 912. The "scramble" system will be used and four main service bars will eliminate waiting in lines. The roof of the building, on the same level as overpass No. 1, will have a canteen and tables and chairs for outdoor eating.

All food preparation for Plant 1 facilities will be centered in the new structure and all canteens etc., including the cafeteria in Bldg. 32, will be serviced from this point.

The building itself will cost approximately a half million dollars and new equipment costing approximately $100,000 will be installed. Contract for the 25,000-square foot cafeteria was awarded to the Chula Vista Electric Co. and Anthony Rossi, incorporated to build the structure as a joint venture. Architect is Albert C. Martin and Associates of Los Angeles.

Exact start of construction will depend upon removal of the present railroad spur now running across Pacific from Plant 1 through the parking lot.

The cafeteria dining room will have an acoustical ceiling and a glass wall looking out on a planting area and walkway. A concrete exterior wall will screen out traffic noises from Pacific Highway.

Parking space will not be reduced with the change of location of the cafeteria as all of the area occupied by the present building ultimately will be cleared for Convair parking.

The new cafeteria will continue to be operated by The Prophet Co., operators of all Convair cafeterias at San Diego, Pomona and Palmdale.

Donors to Be Asked To Bolster Blood Credit at SD Bank

All second-shift people at Convair SD Plant 1 will have a chance to swell Convair SD's blood reserve at the Dec. 10 visit of the San Diego bloodmobile.

Signup campaign will begin next Monday (Nov. 30) when cards will be in the hands of all supervisors.

The bloodmobile will be located in Bldg. 4 between 5 and 9 p.m., said Ken Wulfemeyer of SD employee services.

Blood supply collected during this visit will go to Convair SD's credit at the San Diego Blood Bank and earmarked for emergency use during the coming holiday season when demand usually rockets. Any employee is eligible to draw on Convair SD's account for himself or members of his family by making arrangements with employee services. Only charge is a small service fee.

1,000 New Con-Trib Members Added, But 1,200 Fail to Reply

There are 1,200 people "missing" at Convair San Diego. That's how many haven't answered, either "yes" or "no," to the Con-Trib-Club appeal for members.

So far in the round-up campaign, 1,730 nonmembers of Con-Trib returned cards promptly. Fifty-five per cent, or 943, agreed with the "I signed up once for all" Con-Trib philosophy and joined. Forty-five per cent of the returns were negative.

The increase of almost 1,000 new members has pushed plant participation in Con-Trib to 84 per cent. The desired goal is 90 per cent.

"Campaign returns have been slow," J. K. Field, Con-Trib-Club committee chairman, states. "We hope to conclude the campaign this week and are making one last concentrated effort to solicit returns.

"Con-Trib realizes that some people have legitimate reasons such as hardship and sickness which make joining the club impossible. But all we ask is that people give the subject some thought, consider the many merits which the program certainly has and notify us of their decision by returning the cards."

Results of the drive at Convair SD's off-site bases (Holloman, Edwards, Palmdale) were not available at presstime.

Three 880s in Formation Make a Dramatic Sight

Three white and gold Convair 880 jet airliners, while engaged in individual test flights, winged in formation along the San Diego coast for the first time last Tuesday morning.

Meeting 15 miles off the Point Loma shoreline, they swung together over Coronado Strand and dipped wings as they flew over Greenwood Memorial Park during graveside services for Kenneth Chott, SD flight engineer, a member of plane No. 1's flight crew until his sudden death Nov. 13 following a heart attack.

Convair SD and San Diego sky gazers watched the three huge birds peel off in a fleur-de-lis after they passed over Lindbergh Field. They landed with an hour's interval between each plane.

Don Germeraad, SD chief engineering test pilot, captained plane No. 1 with Larry Brandvig, co-pilot, and Richard Bloom, flight engineer. John Knebel was at controls of plane No. 3 with William Harse, co-pilot, and Robert Scheafer, flight engineer. Plane No. 4 was piloted by W. D. Carrier. Lauren Pilling was co-pilot and Jack Fogelman, flight engineer.

Both planes No. 1 and 3 made their 100th flights this month, with No. 3 reaching the mark Nov. 16 and plane No. 1 on Nov. 2.

The Tuesday morning flight was the first certification flight for plane No. 3. Three Federal Aviation Agency representatives were aboard as it went through airspeed calibration tests.

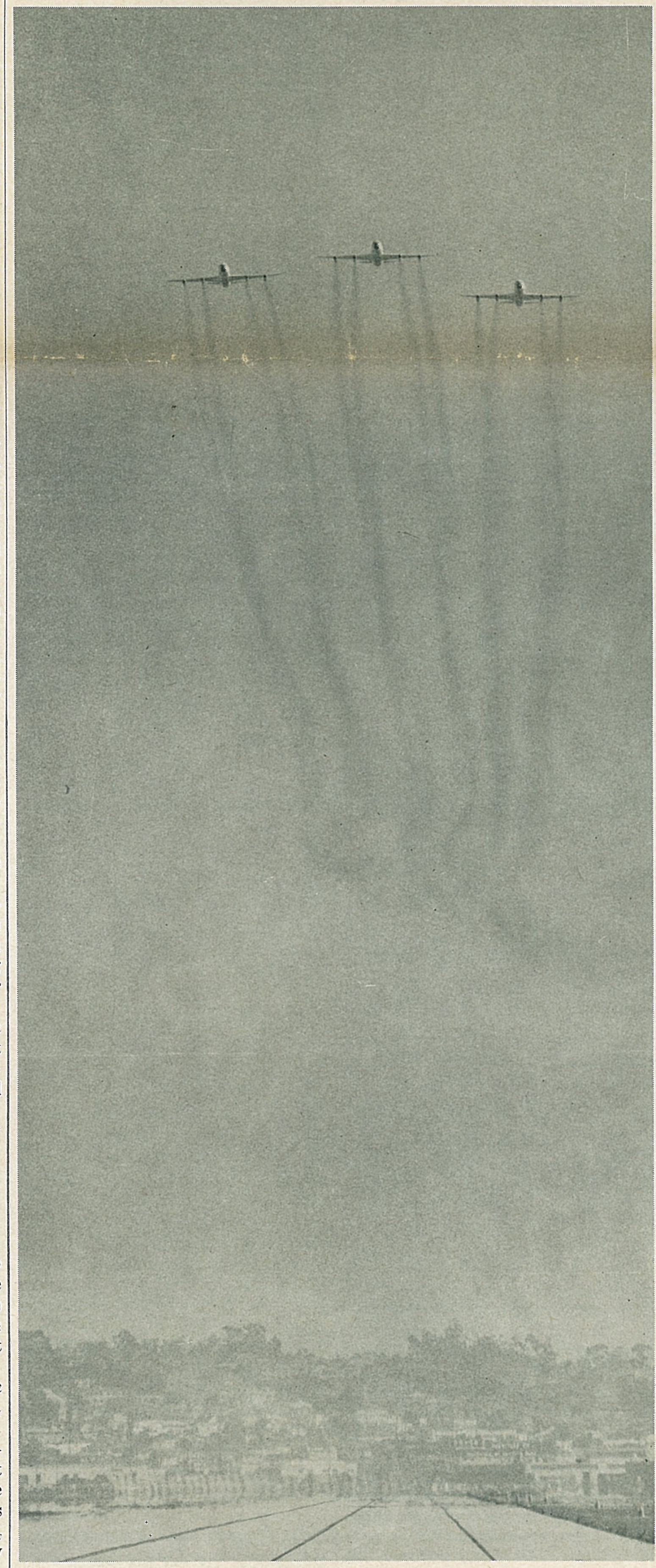
All of the plane's flights from now on will be official certification flights, said R. L. Runnalls of engineering flight test. It will go to Edwards AFB this week to spend the rest of the year in FAA certification tests. Besides official takeoff and landing tests, it will be put through climb performance, minimum control speed, and fuel jettison tests.

The first Convair 880 airliner in the test program, No. 1, will go into FAA certification testing within a couple of weeks and plane No. 4 is due to join the program within the next month.

Plane No. 1 will be tested for stability, control, and flight characteristics, while plane No. 4 will undergo tests on 880 systems, including adverse weather, communication, navigation, air conditioning, and pressurization.

FAA certification testing on Convair 880s will continue into next March, said Runnalls.

According to present plans, plane No. 6, now in the final stages of completion, will join the flight test program some time during December.



THREE OF A KIND—Three Convair 880s wing high over San Diego environs last week in first formation flight. Poor visibility due to low-lying mist was hard on SD photomen, out in full force to catch triple play.

Vega Complex Construction Is Under Way

Construction is under way at Cape Canaveral, Fla., on a launch site from which Convair will fly multi-stage space vehicles which use Atlas as the first stage, including Vega, Project Mercury and Atlas-Centaur.

Preliminary work already is progressing just south of the four existing Atlas flight test complexes at the Florida base. Frank Roberts, Astronautics construction engineer working out of the office of Douglas Livesay, Astro plant engineering representative at AFMTC, is monitoring construction work, as is Carl Scheuplein, Astro technical facilities liaison engineer.

The Army Corps of Engineers has awarded construction contracts for the project under direction of the Ballistic Missile Division, Air Research and Development Command.

The new Atlas launching complex will include a raised concrete pad and ramp, launcher, gantry, service facilities and blockhouse. It will be known as "Complex 36."

The new complex will differ from other Atlas launch units in that the gantry will be 166 feet high (instead of 115 and 130 for present complexes) to accommodate the extra rocket stages, and the blockhouse will be two-storied, instead of one. Completion is expected next year.

SD Management Club Xmas Dance Dec. 5

Annual Christmas dance of the Convair SD Management Club will be held Dec. 5 in the Balboa Park Conference Building starting at 9 p.m.

The early December date has been chosen to avoid conflict with other Christmas activities. Admission is free upon presentation of official invitations which are being mailed to all members.

A buffet dinner will be served between 9 and 11 p.m. Eligible nonmembers must obtain invitations in person from club committeemen.



UNANIMOUS—Convair SD Con-Trib-Club committee voted record-matching $175,000 gift to San Diego United Fund official this month with approval of second reading. Members, with affiliations, are (from left): W. W. Lynt, EAA; E. E. Larsen, IBEW; A. D. Parsons, Management Club; Gladys Story, IAM; J. K. Field and Keith Sears, both management; H. D. Lamb, IAM; D. D. Strange, EAA; and F. H. McLaughlin, management.

Millionth Astro Check Issued to MSTS Man

While J. A. Dailey probably wasn't aware of the fact, his Astronautics pay check Nov. 13 was an unusual one—the millionth Astro has issued to an hourly employee.

Dailey works at Astro's Missile Static Test Site, Edwards AFB.

Even the check failed to tip Dailey. It did not bear the number 1,000,000. Instead, it was numbered 000,002. This was due to the check writing machines at Astro which contain only six digits. And the number 000,001 was affixed to a blank data card on the machine, not a check.

Astro started issuing checks Dec. 7, 1956, after utilizing San Diego facilities prior to that time. That initial run was about 3,500 hourly and 1,500 flat-salaried. Current figures show about 11,000 hourly and 6,000 salaried.

During the past three years hourly Astro employees have taken home over $115 million. Their checks, laid one next to the other, would form a continuous sheet from San Diego to San Clemente, a distance of over 50 miles.

With multiple off-site bases to service, time is a key factor in check preparations at present. Only Air Force Missile Test Center in Florida prepares its own checks.

Timekeeping starts the process rolling early Monday morning with reports on hours worked by all employees the previous week. (Typical totals show 660,000 hours worked one week.) In rapid order matching operations determine each employee's gross pay, his taxes, then his other deductions for the week. Cards punched with this information are fed into a check-writing machine which clacks them out in a solid sheet at a rate of more than 30 per minute. Cutting and sorting operations follow. These operations are performed in Astro's tabulating section.

Payroll then receives the checks for an important addition, the signature of J. A. Dufresne, Astro controller. This, too, is performed by a special machine. Next, sorting operations remove the checks of employees on loan to other departments or working in unusual places.

Normally, off-site hourly pay checks are processed Tuesday morning, with flat-salaried checks following that afternoon. These are dispatched immediately in locked bags. Either commercial air mail or Convair bonded aircraft are used in getting them to their off-site destinations.



ONE MILLION—Astronautics recently issued its millionth hourly payroll check. Here Noreen Korn of tabulating shows check as it clears check writing machine. J. A. Dailey of MSTS received millionth issue, which caps more than $115 million in wages to hourly employees since 1956.

Dept. 190 Groups Move Together Into Bldg. 1

Manufacturing development and manufacturing process specifications groups (Dept. 190) are now consolidated for the first time in the same location at Convair San Diego—Room 39, Bldg. 1, Plant 1.

Transferring to the new location were personnel formerly in Bldg. 33, Plant 1, and others at Plant 2. No major administrative changes are involved.

SD Junior Achievement Groups Keying Sales to Christmas

Two Junior Achievement groups are busy preparing for the Christmas trade under sponsorship of Convair SD Management Club. This is the seventh year that teen-age firms have been directed by the SD group.

E. R. Fink, board of control JA chairman for the Management Club, and W. H. Marshall, chief adviser, report that 28 young people are engaged in turning out products to go on sale before Christmas.

Multi Products Co., meeting weekly on Tuesday nights, is making bacon fryers. The fryers, perforated plates, are placed on top of bacon to keep it straight without turning while frying.

Marshall (Dept. 25), as business adviser of the 14 teen-agers forming the company, is assisted by M. B. Bodger of Dept. 31, production adviser, and C. D. Saxon (Dept. 25).

Unico, Thursday night group, now is working on 500 holiday corsages contracted for the Management Club Christmas dance. They then will begin production of such household items as aprons and hot pads.

Mr. and Mrs. L. T. Betts (he's in Dept. 44-2 at Rose Canyon) are to direct efforts of the Thursday company with Marshall advising on production. More volunteer help can be used, said Marshall, to aid the companies in getting their products on the market. Anyone interested is urged to contact him at ext. 1144, Plant 1.

The JA program is conducted for nine months of each year for San Diego County high school students between 14 and 19 years of age. By organizing their own companies with the aid of adult advisers, they learn the entire procedure of producing and marketing articles. They capitalize their companies by selling stock and handle all funds through a special JA bank supervised by the Bank of America.

Each company meets one evening a week for two hours at the Junior Achievement headquarters, 1122 Seventh Ave.

Con-Trib-Club Reports Affairs For Year at Convair San Diego

CONVAIR EMPLOYEES CON-TRIB-CLUB CHARITY FUND
STATEMENT OF FINANCIAL CONDITIONS SEPTEMBER 30, 1959

Assets			
Total assets—cash in bank			$38,501.23
Liabilities and Surplus Funds			
Account payable—Emergency Aid Fund			$ 2,452.63
Surplus fund:			
Balance September 30, 1958		$56,058.90	
Less: excess of disbursements over receipts for year ended September 30, 1959		20,431.17	
		$35,627.73	
Add: decrease in accounts payable over September 30, 1958		420.87	36,048.60
Total liabilities and surplus funds			$38,501.23
RECEIPTS AND DISBURSEMENTS YEAR ENDED SEPTEMBER 30, 1959			
Total receipts			$360,975.20
Disbursements			
United Funds	$176,200.00		
Hospitals	21,243.98		
Community Chests	17,400.00		
Salvation Army	11,050.00		
Boy Scouts of America	10,500.00		
Guadalupe Clinic	9,000.00		
Young Men's Christian Association	8,500.00		
American Cancer Society	8,300.00		
Family Service Association	8,000.00		
San Diego Society for Crippled Children	7,500.00		
Boys Clubs	7,200.00		
San Diego County Heart Association	6,500.00		
Girl Scouts Council of San Diego County	5,500.00		
San Diego Association for Retarded Children	5,000.00		
Neighborhood House	3,500.00		
San Diego Children's Home Association	3,500.00		
Sunnyside Guild, Inc.	3,500.00		
International Guiding Eyes, Inc.	2,800.00		
Camp Fire Girls—San Diego County	2,500.00		
Girls Clubs	2,500.00		
City of Hope—Duarte, California	2,000.00		
Muscular Dystrophy Association	2,000.00		
National Multiple Sclerosis Society	2,000.00		
United Cerebral Palsy Foundation of San Diego County	2,000.00		
Children's Dental Health Center	1,500.00		
Young Women's Christian Association	1,200.00		
National Cystic Fibrosis Research Foundation	1,000.00		
San Diego Council of Churches	1,000.00		
Travelers Aid Society	1,000.00		
United Jewish Federation	1,000.00		
Volunteers of America	1,000.00		
Los Angeles County Bureau of Public Assistance	850.00		
Olive View Sanitorium	800.00		
Alpine Youth Center and Community Park	750.00		
San Diego City Schools	750.00		
Central Youth Activities—Alamogordo, New Mexico	500.00		
Crossroads Foundation	500.00		
Encinitas Youth Recreational Community	500.00		
Goodwill Industries	500.00		
Hear Foundation	500.00		
Hillcrest Receiving Home	500.00		
Los Angeles County Association for Mental Health	500.00		
National Kidney Disease Foundation	500.00		
Palmdale School District	500.00		
Foundation for Junior Blind	300.00		
Lake Hughes Recreation Association	300.00		
Los Angeles County Epilepsy Society	250.00		
John Tracy Clinic	250.00		
Crippled Children's Society—Los Angeles County	200.00		
Amputee Golf Association	100.00		
Total charitable contributions	$344,943.98		
Transfers to Emergency Aid Fund	35,628.59		
Office supplies, accounting and audit	833.80		
Total disbursements			$381,406.37
Excess—disbursements over receipts			$ 20,431.17

★ Convairiety ★

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Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Alyce Martin. News contacts: AFMTC, Bobbie Waddell, ext. 3038; Vandenberg AFB, Bunny Ingraham, ext. 8-3258; Warren AFB, Bill Jack, ext. 72254.

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Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Office, Room 103, Bldg. 301 B, Palmdale, ext. 337. Staff: Richard L. Millett.

SD Quality Control Assignments Made

New titles and assignments became effective this week for a number of SD quality control men.

R. H. Gilliland was named chief of quality control reliability, reporting to George Covington, manager of quality control. Under Gilliland are quality control engineering, material review, corrective action, and the quality control process laboratories. C. Wallman, reporting to Covington, is general supervisor in charge of quality control activities in the material office at Rose Canyon, including outside vendor inspection.

P. M. Benner was appointed chief of inspection, Plants 1 and 2, reporting to Covington. L. C. Stuckey and J. J. Swarts, inspection general supervisors at Plant 1, and T. W. Brotherton, Plant 2 inspection general supervisor, and E. Caldwell, inspection supervisor, experimental, report to Benner.

SD Dept. 14 Romance Results in Wedding

Jean Main became the bride of Larry Wilson, both of Dept. 14-1 SD, Sunday, Nov. 22. They will make their home in San Diego.

Six Collect Color Photographs As Bonus in Cost Reduction

Six Convair SD folk are winners of color photograph sets under the new Employee Suggestion bonus system.

Weekly winners are judged for most original, practical, complete and ingenious suggestions submitted. These criteria are being used by the cost reduction section in making the awards—which are in addition to cash prizes.

Winners of the photograph sets, which depict Convair planes and missiles, are: Emmett A. Beaudin (Dept. 603-6), William Johnston (Dept. 603), Florence Ojeda (Dept. 233), W. K. Richeson (Dept. 101), C. R. Thompson (Dept. 101), Fred T. Line (Dept. 148) and Gilbert Baca (Dept. 266).

The joint suggestion submitted by Richeson and Thompson also won the monthly award, F-102 desk sets. Baca received the photograph set because it was his first suggestion to be approved and installed.

Cost Reduction Honor Roll

Installed during the last two weeks:



A. A. Vernon

A. A. Vernon's (Dept. 93-2) CIP will save $6,544 a year.

Joint suggestion submitted by H. L. Dodd (Dept. 280), left, and C. E. Shaw (Dept. 288) will save $5,139 a year.



H. L. Dodd



C. E. Shaw

John Dixon Named Planning Manager

John W. Dixon has been named manager of long range planning, effective this week, according to an announcement by B. F. Coggan, Convair vice president and SD manager.

Dixon, a native of Brooklyn, N.Y., has been with Convair SD since 1939 in inspection and quality control departments.

F-106 Radomes Checked As 'Seeker' Pinpoints Center of Radar Beam

Testing of production radomes for F-106s is now under way at Convair SD's boresight range at 2851 Frontier St.

At least five radomes a week are being put through electrical qualification tests on two shifts by Convair SD electronic engineers and technicians at the off-site testing facility, known as Air Force Plant 93. Until last week, testing of most of the F-106 radomes had been done at the Convair SD boresight range on top of Bldg. 54 in Plant 1.

Each F-106 radome (the electrically transparent housing for the plane's radar system) is checked to determine how well it meets high accuracy requirements for ultimate firing of the weapon system, explained J. C. Dobyne, SD assistant research group engineer and project leader for F-106 radome development.

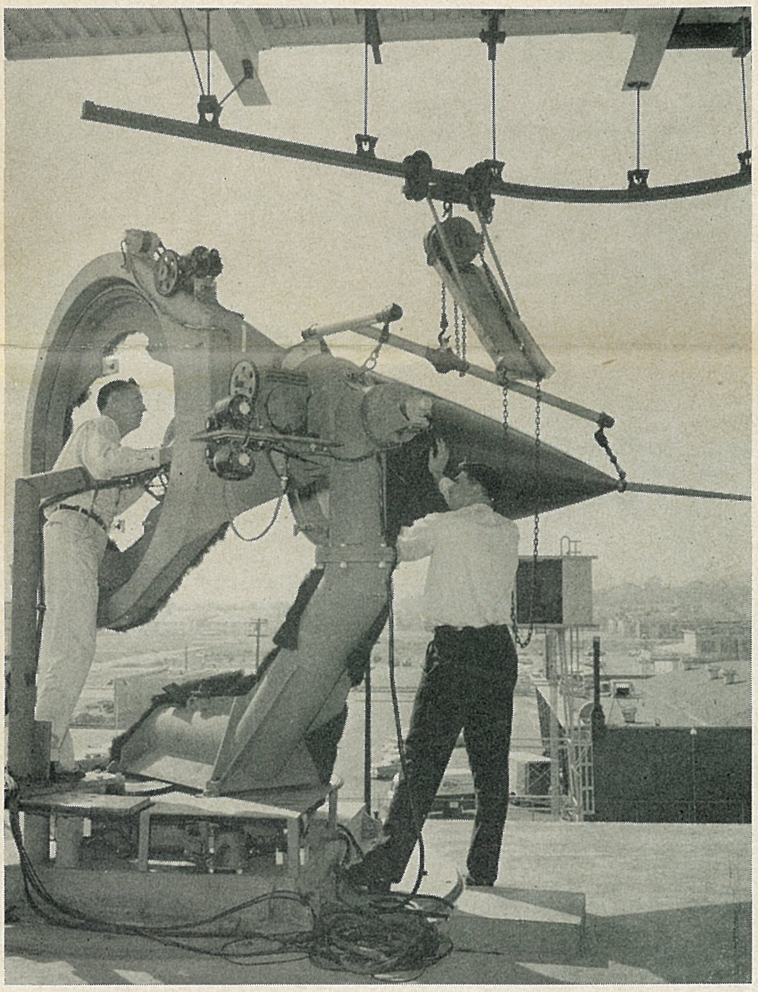
At the new, larger range, which consists of two 40-ft. towers placed 187½ feet apart, radomes are tested to determine direction and quantity of the radar antenna beam as it is transmitted through the radome.

Radomes, placed in specially-built fixtures on the roof of the east tower, are pointed toward the west tower where a "null seeker" spots the center of the beam, originating from the antenna within the radome.

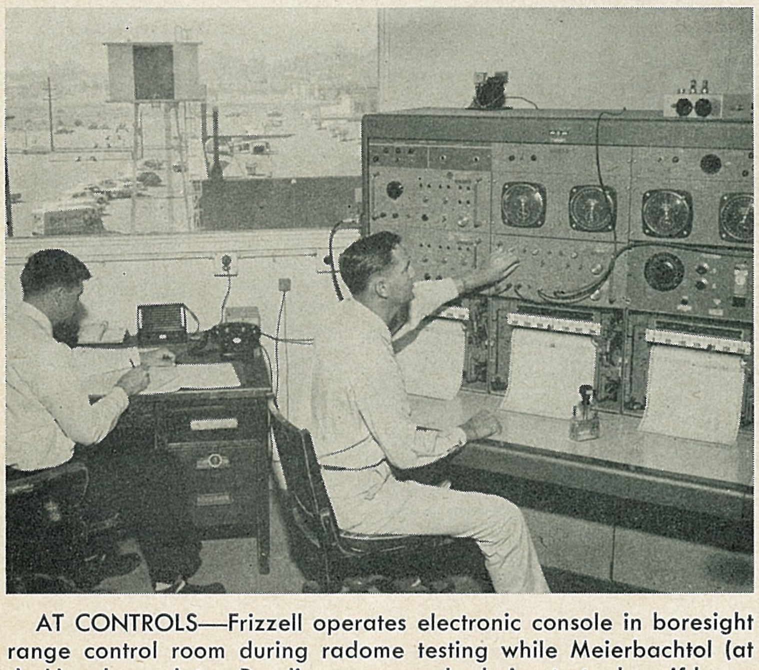
"The seeker can pinpoint the beam's center like a finger poking through the hole in a doughnut to determine if the beam is coming through the radome straight and true. If it is bent, data collected by the electronic console in the tower's control room tells just how much and where. The console also controls movement of the radome fixtures," Dobyne said.

Capabilities of the range, built last year by Convair SD for the Air Force, are beyond usual testing capacity of such facilities. Completely automatic, the facility can handle radomes up to 15 feet in length. In fact, six of the largest airborne nose radomes of this type ever built have been in research and development at the Convair range during the last few months. Production radomes are 6-ft. long, with 5-ft. nose probes.

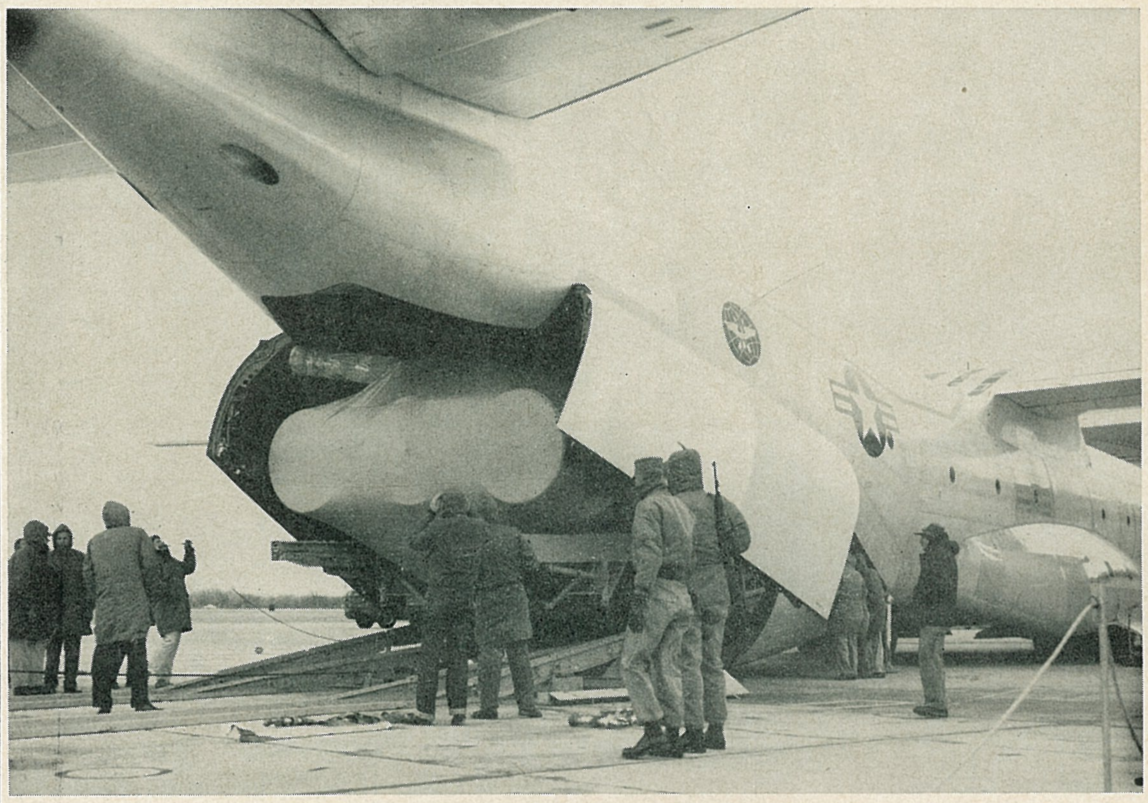
Directing operations at the range site is C. J. Meierbachtol, electronics engineer, under supervision of W. G. MacAllister, senior research engineer in charge of radome testing both at the Frontier St. site and the in-plant boresight range.



SWINGING HIGH—R. L. Frizzell, Convair SD electronics lab technician (at left), and C. J. Meierbachtol, SD electronics engineer, swing F-106 radome into place on fixture atop boresight range tower preparatory to testing it with transmitter in second tower (in background). The two 40-ft. towers are located on Frontier St. just off Rosecrans in San Diego.



AT CONTROLS—Frizzell operates electronic console in boresight range control room during radome testing while Meierbachtol (at desk) reduces data. Readings on console during tests show if beam from radar is accurate.



BRRRR—First Atlas missile to ride in an airplane is unloaded in Cheyenne, Wyo. In few short hours missile traveled from warm California sunshine to near-zero weather. Unloading was hampered by high winds.

Second Atlas Takes Air Route To Cheyenne

Convair's Atlas missile has been proclaimed a "seasoned air traveler" following two successful aerial delivery flights from San Diego to Cheyenne, Wyo. aboard a C-133B turboprop, the Air Force's largest transport.

And Astronautics crews have had their first taste of handling an Atlas in sub-freezing weather.

In the past, Atlas deliveries have been via truck and trailer. Deliveries by air were made for logistic studies and to prove aerial delivery possibilities. Special modifications were made on the transport to allow the huge Atlas to travel as air cargo.

Nov. 3 marked the initial delivery flight, San Diego to Cheyenne. A second flight over the same route Nov. 10 lopped an hour and 11 minutes off the 4 hours, 45 minutes required for the initial flight. Both missiles were destined for Warren AFB.

Initial unloading operations were despite temperatures of 6 degrees and winds of 30 knots with gusts up to 50. A nearby hangar provided some wind protection, while the plane was faced into the wind to facilitate unloading from the clamshell doors at the rear of the fuselage.

Numb fingers laid a set of portable tracks leading down the plane's ramp to the concrete apron. The Atlas, riding on dolly wheels on its handling trailer, was then snaked out. Internal jacks lifted the trailer to its normal position, while the rear wheels, a part of the cargo, were replaced. A truck then hauled the missile away. Loading operations at Miramar NAS near the Astro plant had been a reversal of this procedure.

G. E. Garrison of Astro's shipping section was loading supervisor for both flights. Ed McCleave supervised unloading crews at Warren.

The first two loading operations fell to men from Astro's stores and traffic operation. Subsequent operations will be turned over to Dept. 773.

Additional flights are being scheduled for the future.

Convair Men Attend Electronic Meeting

Convair men from the San Diego area were on hand recently for an Electronic Industries Association Conference held in Philadelphia.

Ed Heller of Convair Pomona served as a session moderator. Other Pomona men in attendance were Dick Wildman and Ben Schroeder, both of engineering. Stan Carpenter of San Diego Division engineering and Earl Sheeran of Astronautics' material department also attended.

FW Fog Machine Can Disinfect Assembly Bldg. in Two Hours

London fog can take a back seat compared to mist created by a disinfectant machine at Convair Fort Worth.

Driven by a small jet engine, the fogger can disinfect the whole main assembly building in about two hours, according to Guy Nesbitt of plant engineering.

And when it revs up, it shrieks louder than all the doomed in Hades.

Stalking crickets in the fall or mosquitoes in the spring, the fogger is on the move inside and outside the plant. It protects shrubbery on the grounds as well as all parts of the building.

Not completely vicious, the fogger does humanitarian chores in its spare time. During the 1957 flood it disinfected more than 300 homes of employees affected by flood waters.

Disinfectant solutions are easily changed from a deadly mixture for roaches to a disinfectant that can be used in the cafeteria.

Plant engineering also has a junior-size portable fogger that can be carried by its operator.



INSECTS BEWARE—Powerful insect spray is "fogged out" by jet-driven disinfectant machine used by Johnny Reagan, Dept. 25-4 at Convair FW.

Maine Visitors Briefed on F-106

First orientation tour of Convair SD's plants to acquaint community leaders with the F-106 was held last week under joint sponsorship of Convair and the Air Defense Command.

Twenty-eight AF officers and civilian officials from the area surrounding Loring AFB, Me., spent all day last Wednesday at Convair SD becoming acquainted with the F-106 jet fighter-interceptor, its construction, capabilities, and air defense mission.

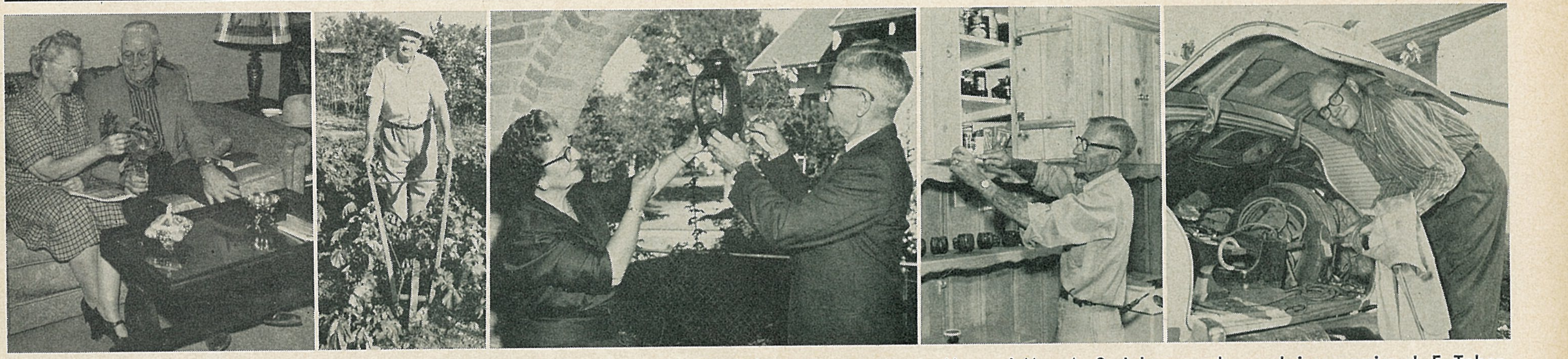
Plant visitors came from Presque Isle, Caribou, Limestone, Grand Isle, Van Buren, Bangor, Fort Fairfield, and Hamlin. Among AF officers in the group was Brig. Gen. S. W. Wells, commander of the 45th Air Division.

The 27th Fighter - Interceptor Squadron at Loring is now converting to F-106s.

Orientation tours for the F-106 at Convair San Diego will parallel the series conducted for military and civilian personnel during phasing-in of F-102s at Air Force bases throughout the country.



DEAN OF DESIGNERS — Dr. Theodore von Karman, often called dean of modern aircraft designers, inspected jet 880 at SD recently and called it "THE airplane of next 15 to 20 years." He is shown with R. C. Sebold, Convair vice president-engineering. Dr. von Karman pioneered much of theory in development of supersonic flight. While in San Diego he inspected an 880 and watched takeoff from Lindbergh Field.



TAKING IT EASY?—Retirement has meant an active life for these alumni of Convair Fort Worth. From left: Mr. and Mrs. Roy Stephenson, who concentrate on rose bushes; William McDaniel, whose backyard garden includes everything from turnips to grapes; Mr. and Mrs. A. S. Johnson, who work in ceramics; J. F. Toberman, cabinet maker extraordinary; Carl Hobbs, who shoes horses, loads car with tools of trade.

Retired Convair 'Alumni' Leading Productive Lives

Retirement means anything but sitting in a rocking chair for Convair Fort Worth employees now drawing Convair retirement checks.

Fact, is, they're busy as bees.

Take Carl E. Hobbs, for instance.

Loading his hammer and anvil into his car, this retired Dept. 25 employee spends part of every day shoeing horses at local stables!

Hobbs combined his enthusiasm for horses and his favorite hobby, travel, with a recent trip to Denver to the horse races.

This type of "active retirement" appears to be the rule.

A. S. Johnson, 67, is a good example.

House and yard keep him busy. But home improvements include not only painting and repairing. He has filled the rooms with striking ceramic pieces made in pursuit of a long-time hobby.

He retired a little more than a year ago, and since then, Johnson and his wife have toured from California to Mississippi. They even explored for diamonds in Arkansas!

Travel has no place in the plans of J. F. Toberman.

In the Navy from 1908 to 1926, he went around the world three times.

His daughter, Mrs. L. E. Cain, with whom he has lived since the death of his wife, says her kitchen sparkles with all-new knotty pine cabinets and shelves—made by hand tools and installed completely by Toberman.

William McDaniel, retired from Dept. 31 since last March, goes in for fishing and farming.

His back yard has been a vegetable garden for about 12 years, but the crops are more extensive now that McDaniel can spend part of every day cultivating them.

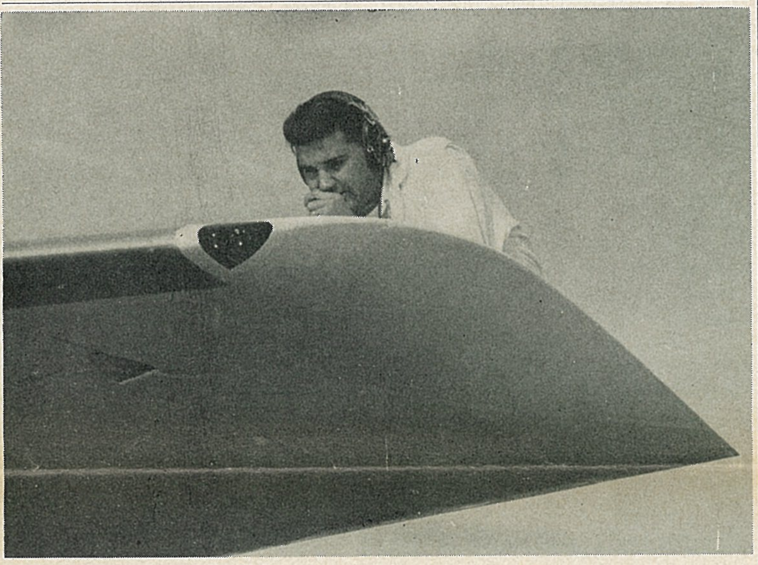
Oklahoma is his favorite fishing spot, and he goes "every time I get a chance."

Another Convair employee, now retired for the second time, is Frederick J. Tobin. He came to Convair with many a tale to tell about his 35 years in the Navy, from which he retired in 1947.

Tobin still gets up at five every morning, putting in many entire days working on landscaping his lawn at 3713 W. Fourth.

Roy Lee Stephenson, retired from Dept. 6-2 since 1957, is another "second time retiree."

Before coming to Convair he had retired from teaching school in Cooper. He was a principal for nine years, and superintendent 23 years.



COME IN, BAGHDAD!—Dick Cote, Convair SD radioman (Dept. 170), is caught in midst of "magic carpet" act on wing of Convair 880 by SD photographer Pete Autio, as plane No. 4 is pulled through compass tests by tractor.

Winner of Six Acting Awards 'Dishes It Up' at Cafeteria

If one performer ever threatened to dominate the annual Atlas award selections at San Diego's Old Globe Theatre, then Lillie Mae Barr is "it."

She's won six Atlas awards, symbolic of achievement in acting.

Lillie Mae is a Prophet Co. employee at the Astronautics cafeteria.

(Ironically, two of her closest rivals for Atlas honors are Astro employees. A. W. (Andy) Anderson of material department and Alyce Martin, Astro's Convair-iety staff, have each won two awards.)

Born in South Wales, Lillie Mae came to the United States as the bride of an American soldier after World War 1. She has never received dramatic training, although she is an accomplished pianist who plays "by ear."

Her first California stage work was many years ago in a Ventura production of "Ten Nights in a Barroom."

In 1949 Lillie Mae tried out for and won the part of Mrs. Watty in "The Corn Is Green" at the Old Globe. Her performance won her an Atlas nomination, the only one she has ever received without winning! And she still considers this as her best performance.

Lillie Mae Barr is best known for her musical comedy roles in "Caught in the Act," the Old Globe's annual original musical production. She is most often associated with her renditions of "On the Wagon," "Cloverleaf," and "Tuna Fish Lillie." Five of her Atlas awards were in this category.

Her latest Atlas came for her character performance in "Witness for the Prosecution."

Critics are currently hailing her "Green Stamps on the Moon" number in the Old Globe's "Live It Up," a musical now in performance. In this she portrays an astronaut who travels to the moon to set up a trading stamp concession. She wrote this number as well as the music for the opening number, "Gracious Living" which is included in the show's overture.



BAFFLED?—Perplexed expression is a trademark of Lillie Mae Barr, Old Globe Theatre regular and Astro cafeteria employee. Lillie Mae has won six Atlas awards, a record.



THRILLED—Jerrie Cobb, aviatrix, beams after first supersonic flight in Convair TF-102 at Tyndall AFB, Fla.

Aviatrix Enjoys Ride in TF-102

Flight in a Convair TF-102 was high spot for aviation's "Woman of the Year" during the recent William Tell II meet at Tyndall AFB, Fla.

Jerrie Cobb, 28-year-old Oklahoma City aviatrix, writes that her first supersonic flight in the Convair interceptor was "quite a thrill." In her 16 years of flying and over 7,000 hours in the air it was the highest and fastest she had ever flown—46,000 feet altitude and Mach 1.3 speed.

Miss Cobb was named 1959 "Woman of the Year in Aviation" for setting a class world speed record in an Aero Commander at the World Congress of Flight at Las Vegas this spring.

Remember Cruise

Shipmates on USF Constitution Reunited After Two Decades

When old shipmates get together, the conversation usually runs to sea stories. Convair Pomona's Godfrey C. King (Dept. 25) and Fred P. Elliott (Dept. 31) are no exceptions, but their stories have a different flavor.

These two retired Navy chiefs served together as crew members on one of the Navy's oldest and most remarkable ships, the U. S. Frigate Constitution—a distinction that few men alive today can claim.

King was a member of the crew when "Old Ironsides" was recommissioned July 1, 1931, following the ship's restoration, and he served aboard her until Sept. 2, 1937. During the first three and a half years of this period the Constitution made a cruise from Maine to Washington, via the Panama Canal, visiting 97 ports along the way.

Elliott joined the crew in San Diego in 1933, and remained aboard until the conclusion of the "grand tour" the following year.

"During this cruise we received over 11½ million visitors aboard the ship," King recalled. "We not only had our regular duties aboard the ship—I was a main royal yardman — but we also served as guides and explained different parts of the ship to visitors."

The Constitution was towed throughout the cruise by the Navy tug Grebe, King recalled, although the ship usually carried a few sails to ease the tug's burden.

"This was probably a good thing, because in one storm off the West Coast we were unable to make any headway for three days, even with the tug," King said.

"That was the time we saw the same lighthouse in the same position for three straight days," Elliott added.

Following the cruise the Constitution returned to the Charlestown Navy Yard in Boston (where she is currently located) and King remained aboard as one of two men responsible for maintaining the rigging. Elliott was transferred to other duty.

"This was quite a job," King said. "The ship has 74,000 square feet of sails—32 sails in all—and 12 miles of running rigging. We had to take all of this down each winter, and put it back each spring. The total weight aloft was approximately 68 tons."

King, now fully retired, transferred to the Fleet Reserve as a chief boatswains mate in 1947, and joined Convair at San Diego in Feb., 1948. Following his duty aboard the Constitution he served on various ships, was aboard the USS Utah during the bombing at Pearl Harbor, and participated in 13 campaigns during World War II in the South Pacific and the Aleutians. At present he is a rigger in the maintenance section of plant engineering.

Elliott transferred to the Fleet Reserve in 1954 after 23 years service. He joined Convair Pomona in June of that year. He was an aviation hydraulics chief, and at present is a test laboratory mechanic. He also saw extensive service during World War II, and his last ship was the USS Valley Forge.

After Elliott left the Constitution in 1934, the two men did not see each other again until shortly after Elliott joined Convair, 20 years later.

EXPLOSION INJURY FATAL FOR CAUTHEN

Funeral services for Sidney Cauthen, Dept. 75 at Convair Fort Worth, were held Nov. 8 in Fort Worth. Burial was at Wapanucka, Okla.

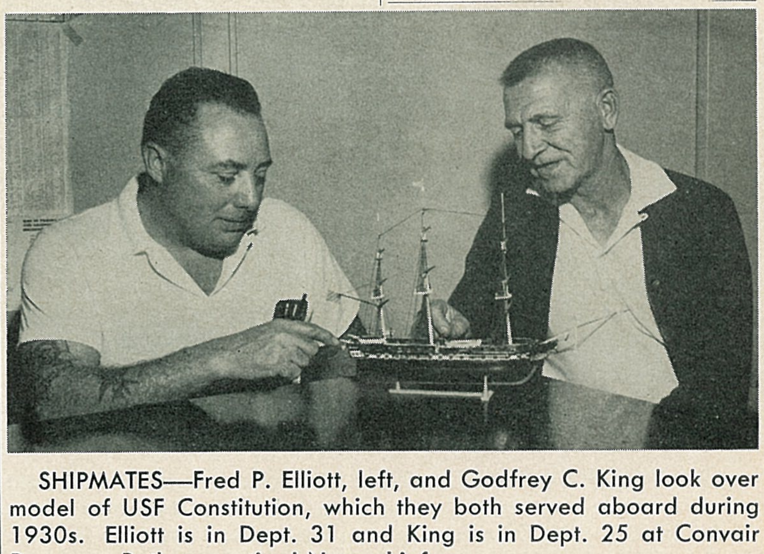
Cauthen died Nov. 6 as a result of injuries suffered in the May 14 explosion of a B-58 on the Convair ramp. He had been in Harris Hospital since the blast.

Survivors are his widow; three sons, Paul, 9, Reggie, 7, and Melvin, 2; parents, Mr. and Mrs. J. W. Cauthen of Tulsa; two sisters, Mrs. Opal Radtke of Tulsa and Mrs. Evelyn Paregien of Fillmore, Calif.; two brothers, Marvin Cauthen and Johnny Cauthen, both of Tulsa.

New 'Economy Cars' Considered at SD

Convair SD people may be riding on company business in some make of the new small American cars if they prove suitable for company use.

Models of the recently-released economy-size cars have been in SD plant during the last two weeks for evaluation, said B. R. Hisaw, chief of transportation operations. Some of them may be added to SD's transportation pool in the future, said Hisaw.



SHIPMATES—Fred P. Elliott, left, and Godfrey C. King look over model of USF Constitution, which they both served aboard during 1930s. Elliott is in Dept. 31 and King is in Dept. 25 at Convair Pomona. Both are retired Navy chiefs.

SD Eliminating 'Coffins' For Shipping Wing Skins, New Method Is Adopted

Convair San Diego is "saving its skin" by eliminating "coffins."

A modern method of packaging wing skins for the Convair 880 and 600 jet liners is making the former "shipment by coffin" routine obsolete.

Huge wooden boxes, used to package wing skins for transport between Los Angeles vendors and Convair San Diego, are being discarded. Instead, modern "A" shaped frames are now being used, cutting loading and unloading operations to one-fourth the time formerly required and doubling the number of skins per truck shipment.

Over $50,000 in Convair savings is estimated on some 1,100 skins still to come for planes currently on order. It takes 24 of the skins to make up a ship's set.

The ease with which skins are loaded and unloaded off the "A" frames is a double saving, because skins are handled twice even before arriving at Convair SD. In addition to suppliers in Los Angeles, an El Segundo company, Mill-Polish, dismantles the assembly in order to remove blemishes, polish and cover.

Other advantages were also pointed out by J. J. Janssen, SD packaging specialist. Supports and crating to hold the skin in place are no longer required. They now rest on the frames supported by nylon webbing.

Also, entire assemblies can be lifted off the semitrailer by one fork lift truck. Formerly, four men and a crane were required for the unloading job.

The new method is also safer. Previously, when uncrating, there was danger that the cover of the huge box (28-ft. long, 7-ft. high) would crash down on a foot or crush a hand.

Ten of the Convair designed racks have been built by the La Mesa Tool Co. Working with Janssen on the project were B. J. Handwerker (Dept. 8) and A. R. Hermann (Dept. 34).

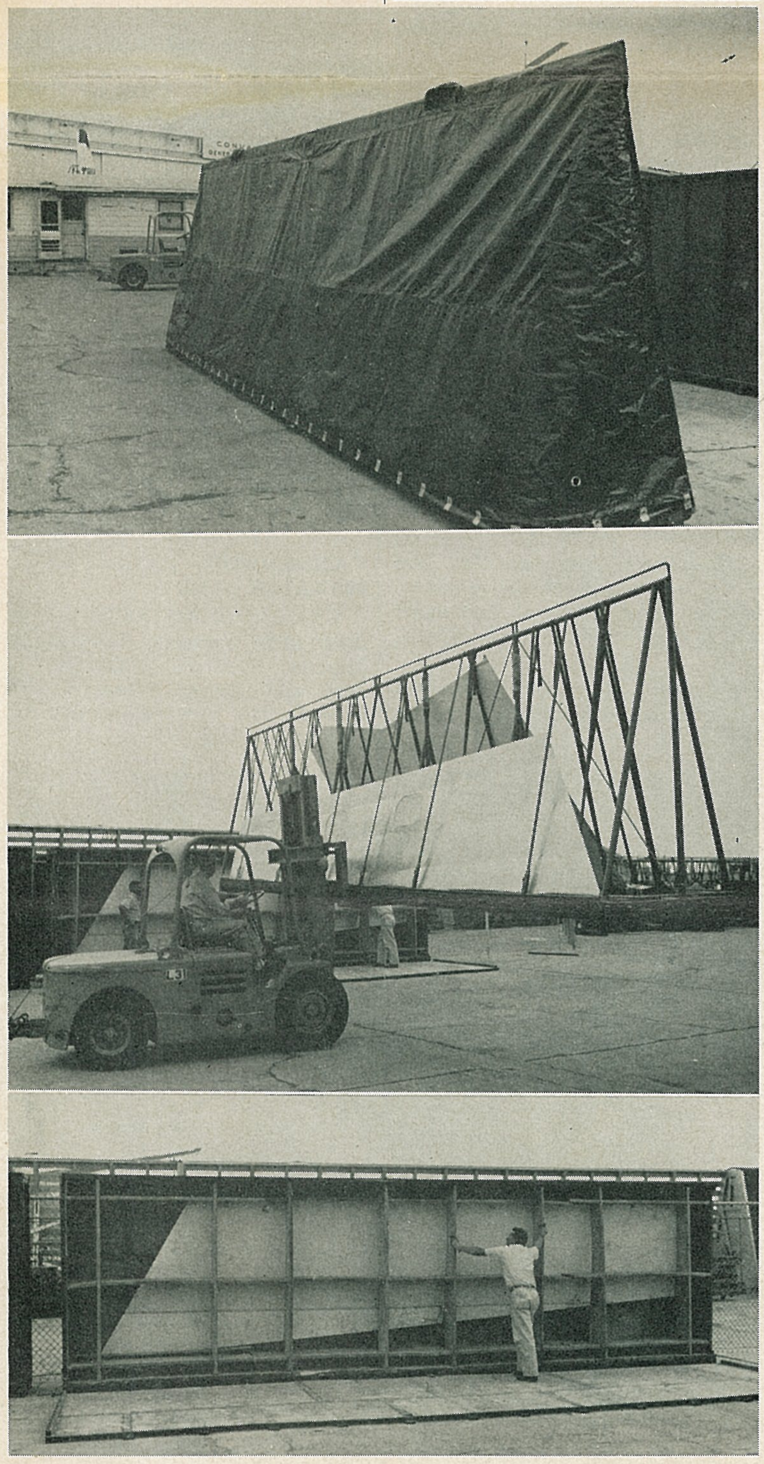
Improvements on the new racks are already being considered. By "inter-weaving," it may be possible to get as many as four skins on each rack, doubling the shipment load to eight.

Experimental Plane Testing Subject of Talk For IAS, EAA

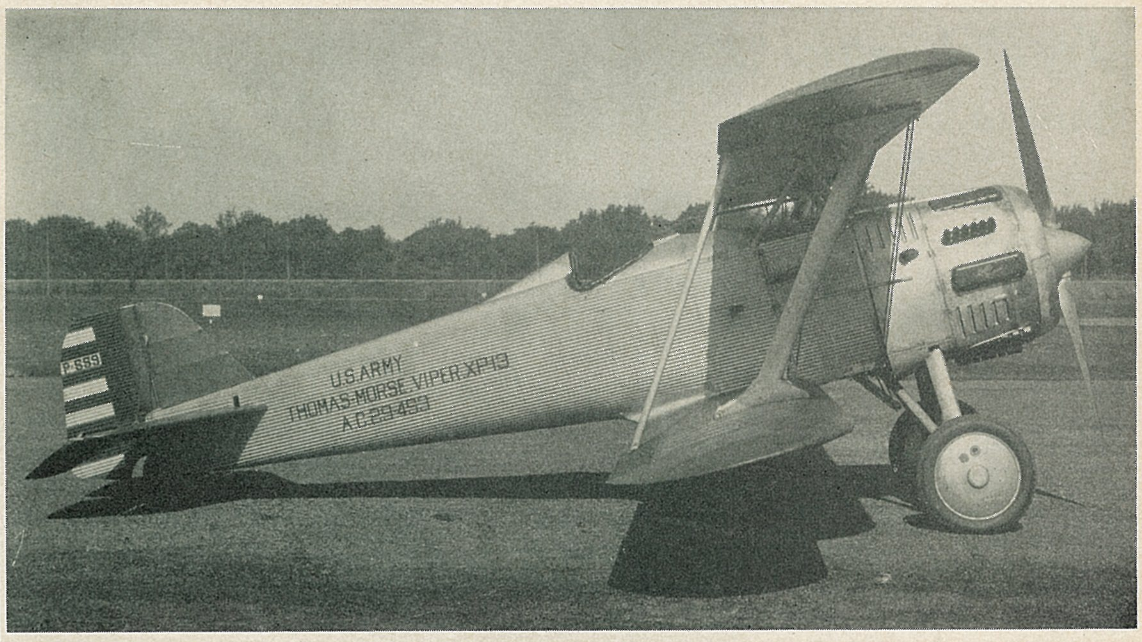
San Diego chapters of the Institute of Aeronautical Sciences and the Experimental Aircraft Association will conduct a joint meeting Dec. 3 in the Continental Room of the Hotel San Diego.

Main speaker, Ralph Wilcox, senior Convair SD design engineer and vice president of the Experimental Aircraft Association, will discuss "Design, Construction, and Flight Testing of Personal Experimental Aircraft." He will also show a movie of different designs built and flown by members at the last national meeting.

Main business will follow the 7:30 to 8:30 p.m. dinner. For tickets, contact K. R. Hinman, ext. 2762, Plant 1; or Anette Perkins, IAS secretary, CY-5-5119.



CRATE TO RACK—Streamlined method for transporting wing skins for 880 and 600 jetliners is portrayed in center. Lift truck can easily pick up entire unit. Above is special protective shroud covering skins during shipment. Below is old "coffin" method, required four men and crane for unloading. It could hold but one skin at a time, compared with two on rack.



THE VIPER—This was Thomas-Morse XP-13, called Viper, a one-place fighter. An Air Corps performance report of 1930 described it as having "comfortable feel" in all aerobatics. "Makes a wonderfully smooth slow roll." Wings were of wood and fabric with ailerons of corrugated metal sheet. Fuselage was aluminum alloy. Fin and stabilizers were of metal and fabric and control surfaces of corrugated metal sheet.

When Thomas-Morse Co. Pioneered In Metal It Spelled Real Trouble

(Following is installment No. 22 in a continuing series dealing with history of early companies that later became part of Convair.)

During the 1920s and up until its purchase by Consolidated Aircraft in 1929, Thomas-Morse Aircraft remained in business as a small manufacturer whose efforts centered in pioneering the field of metal aircraft construction.

As B. Douglas Thomas, the firm's chief designer, recalled it years later, "We got the jump on everybody with the S-4 trainer," (**Convairiety**, Nov. 11, 1959) "and then we got the jump on everybody with the MB-3. But when we tried to get the jump in metal, we were in real trouble."

One of the earliest all-metal planes built in the United States was the TM-22, a parasol-winged pursuit type produced by Thomas-Morse to compete in the 1922 Pulitzer Trophy races. It had wings of built-up duralumin channel members, covered with corrugated sheet. The fuselage was fashioned of corrugated sheet laid over former rings. The rings had to be opened up or drilled to permit riveting.

America lagged far behind Europe in metal aircraft progress; neither tools nor ready-made materials were available. Thomas-Morse sometimes adapted woodworking tools to new purposes; corrugated sheets were made by running smooth stock through a wood planer fitted with corrugated rollers. In order to obtain extrusions, the company procured its own dies and lent them to the Aluminum Co. of America.

The TM-22 and other Thomas-Morse ventures in metal fabrication stirred wide professional interest, but the outcome of the Pulitzer race augured ill for innovators. The two Ithaca-built racers finished 14th and 15th in a field of 15!

In 1925 the Air Corps suggested that Thomas-Morse undertake fabrication of a metal version of the new Douglas O-2 observation plane. The Ithaca firm accepted the challenge and turned out two experimental XO-6s, losing some $60,000 in the process. Orders for four production models followed, and in 1928 the Air Corps ordered an XO-19, a redesigned version using fabric surfaces on wings and tail. Testing established the model's worth and a large production order was expected in 1929.

Before this came to pass, however, the parent Morse Chain Co. was sold to Borg-Warner. The aircraft subsidiary, deemed a financial liability, was omitted from the transaction and Frank L. Morse was left controlling it. On Aug. 5, 1929, he sold the company to Consolidated Aircraft for 10,000 shares of Consolidated stock. (Market value at the time was about $440,000.)

After Thomas-Morse was set up in Buffalo as Unit 4 of the Consolidated factory, work started on an order for 70 O-19s. Additional contracts for improved versions of the observation plane boosted the final total to 170, the last delivered in 1932.

Safest of the Thomas metal designs—and last to bear the Thomas-Morse name — was the Y1O-41*, a sleek sesqui-wing that reached speeds of 195 mph when tested by the Air Corps. By then, however, the depression was in full force and Army funds were short. The plane failed to win a production order.

B. Douglas Thomas' last work at Buffalo was on the XB2Y-1, a chunky dive bomber for which the Navy supplied the basic designs. He retired in July, 1933, and now lives in La Jolla, Calif. (**Convairiety**, Sept. 30, 1959.)

***In Air Corps designator code, the "1" following the "Y" showed the aircraft, though undergoing service test, was a company-financed venture and involved no cost to the government. During early testing the designation XO-932 was used.**

R4Y Transports Accident-Free

Four years of flying without an accident is the record piled up by Convair-built R4Y-1 cargo transports attached to the Fleet Tactical Support Squadron One based at Patuxent River, Md.

Since the fall of 1955, when first R4Ys arrived at the Maryland base, the huge transports have been in the air nearly 100,000 hours. Cargoes have ranged from nuclear weapons to emergency supplies and vital parts for isolated outposts. They have visited more than 98 countries, colonies, and protectorates and covered more than 20,000,000 miles.

Officials at the base credit the emphasis on safety precautions in ground and flight training for the perfect record.

Convair SD field service representative at Patuxent River is Don Weaver.

Teachers Visit Convair Plant

Convair San Diego played host to 38 teachers from San Diego County schools on the tenth annual Business-Education Day Nov. 11.

For the fourth year, Convair SD opened its doors to a group of educators to show them behind-the-scenes activity in the aircraft plant. During the day they saw production lines of the Convair 880 jet transport in Bldgs. 2 and 3 at Plant 1, low-speed wind tunnel, digital and analog computers, and 880 wooden mockup.

Before the tour they heard Dr. D. W. Conover speak on "Human Factors in Space Flight" in Bldg. 14's auditorium.

Guiding the visitors through Plant 1 were G. H. Woodberry (Dept. 192), O. L. Hunley (Dept. 400-1), M. M. Doerr (Dept. 135), and C. M. Craig (Dept. 180).



CANINE CHAMP—Flip von Wood, award winning Doberman Pinscher owned by J. C. Wood, Fort Worth Dept. 6-6, is embraced by Wood children Craig, 6, and Janee, 2. In recent Dallas show Flip scored 199 points of possible 200 in obedience trials. Dog is two years old.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Nov. 16 through Nov. 30:

Thirty-five-year: Dept. 233-0, W. E. Koch.

Thirty-year: Dept. 400-1, E. L. Raymond.

Twenty-year: Dept. 6, F. D. Applegate, S. R. Carpenter, W. C. Gilger; Dept. 31, Anthony Kolodziej; Dept. 400-1, F. C. Linn; Dept. 406, G. L. Farrington, H. E. Ray.

Fifteen-year: Dept. 8-6, C. B. Wohler; Dept. 34-1, V. M. Burns; Dept. 110, A. H. Jorgesen; Dept. 116, Mamie L. Ervast; Dept. 280, R. N. Neville; Dept. 403, Lynn A. Johnson.

Ten-year: Dept. 1-71, D. M. Thomas; Dept. 3-5, Bertha R. Chesbro; Dept. 6, R. A. Lynch, J. P. McNelly; Dept. 14-4, Lillian H. Brown; Dept. 15-5, R. E. Coleman; Dept. 31, G. F. Lang; Dept. 44-2, W. B. Ambrose, Ethel M. Howard.

Dept. 93-2, June M. Scott; Dept. 101, J. B. Perez; Dept. 206, R. N. Welcome; Dept. 215, Elizabeth L. Clarke; Dept. 218, Jeraldine W. McCuan; Dept. 230, Olive R. Rader; Dept. 231, Bessie S. Haight, Lucy H. Nipp, W. J. Witaszak; Dept. 280, G. E. Wilson; Dept. 288, Lena R. Thomas; Dept. 292, M. W. Glithero, Josie T. McNutt.

Retirements

SAN DIEGO

BOCAN—Joseph R., Dept. 25-1. Seniority date Oct. 16, 1950, retirement effective Aug. 4, 1959.

GREEN—Joseph, Dept. 25-1. Seniority date Aug. 7, 1950, retirement effective Nov. 13, 1959.

HOFMANN—Richard, Dept. 403. Seniority date Jan. 22, 1951, retirement effective Sept. 14, 1959.

LEVY—Mathieu, Dept. 25. Seniority date July 19, 1950, retirement effective Oct. 6, 1959.

MACHADO—John F., Dept. 25-1. Seniority Aug. 12, 1955, retirement effective June 1, 1959.

McMANUS—Charles F., Dept. 292-1. Seniority date Nov. 11, 1935, retirement effective Nov. 6, 1959.

SHIVELY—Raymond G., Dept. 407. Seniority date March 10, 1952, retirement effective Nov. 6, 1959.

SMITH—Anne W., Dept. 3-5. Seniority date May 19, 1952, retirement effective Nov. 13, 1959.

Promotions

SAN DIEGO

Promotions to or within supervision effective Nov. 9.

Dept. 6-51, Engineering: To product support group engineer, W. Garcia.

Personals

SAN DIEGO

I am most grateful to Dept. 267 friends for the expressions of sympathy at the death of my mother, Josephine Valdillez.

Ralph Valdillez, Dept. 267.

* * *

We deeply appreciate and gratefully acknowledge the flowers which were such a kind expression of your sympathy in the loss of our husband and father, Benjamin M. Bender (Dept. 603).

Mrs. Benjamin M. Bender and family

* * *

My sincere thanks to Convair friends for the many expressions of sympathy when I lost my mother.

Letty Thomas, Dept. 192

Births

SAN DIEGO

ADAMS—Son, Terry Leon, 8 lbs., 7½ oz., born Oct. 23 to Mr. and Mrs. Harry Adams, Dept. 406.

ANDREWS—Son, Guy Matthew, 6 lbs., 13 oz., born Oct. 17 to Mr. and Mrs. K. W. Andrews, Dept. 6.

McCLELLAND—Daughter, Lou Ann, 10 lbs., born Nov. 8 to Mr. and Mrs. Merle F. McClelland, Dept. 603-5.

PAUL—Son, Charles James, 5 lbs., 11 oz., born Nov. 15 to Mr. and Mrs. B. E. Paul, Dept. 8-5.

Deaths

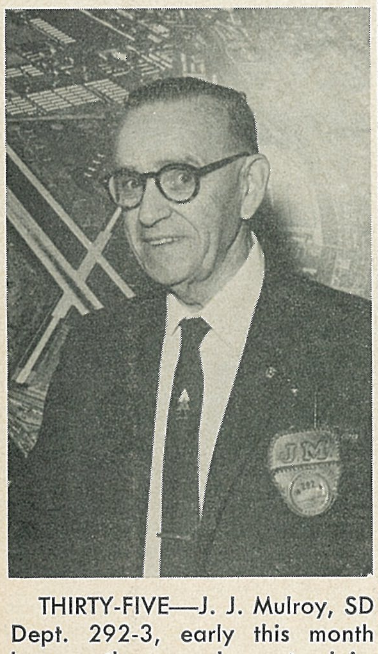
SAN DIEGO

BENDER—Benjamin M., Dept. 603. Drowned Nov. 6. Survived by wife, Dorothy B. Bender.

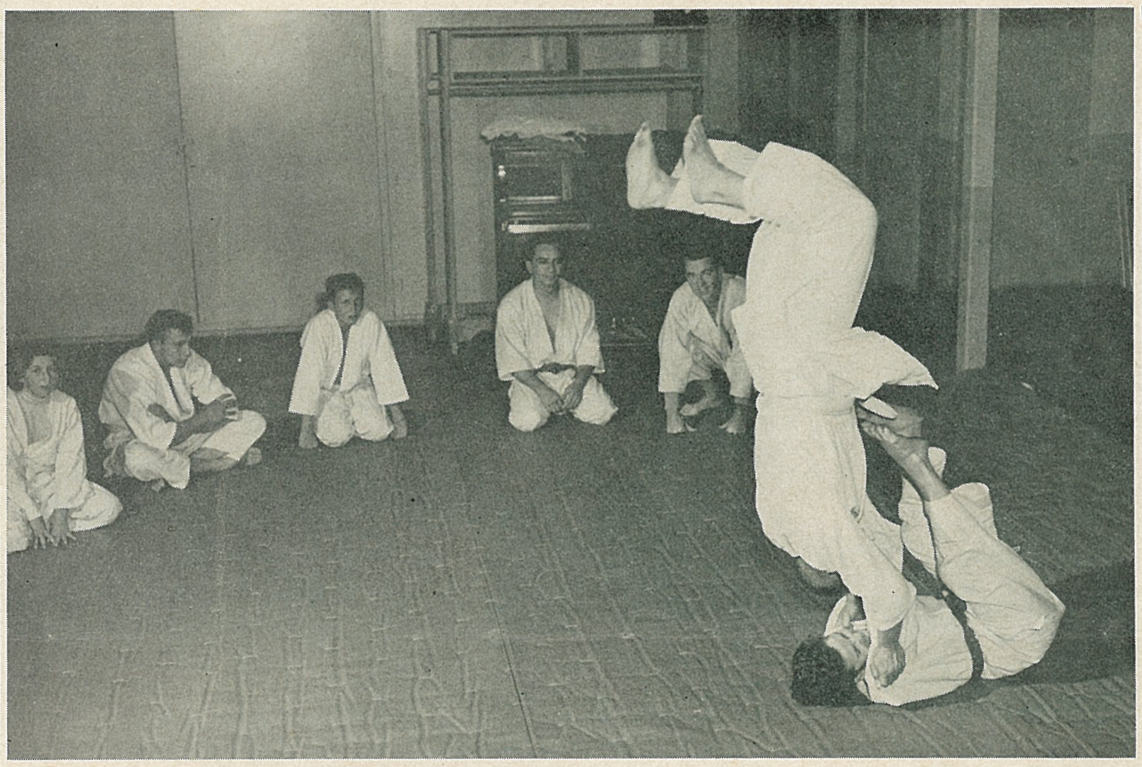
CHOTT—J. Kenneth, Dept. 6. Died Nov. 13. Survived by wife, Hazel R.; son, J. Kenneth, Jr.; two daughters, Nancy and Cheryl; and his mother.

COLE—Claude, Jr., Dept. 7. Died Nov. 6. Survived by wife, Diane; daughter, Christine; three sons, Michael, David and Andrew; his parents, Mr. and Mrs. Claude, Sr.; two brothers and two sisters.

ROBINSON—Claude E., Dept. 6. Died Nov. 9. Survived by wife, Blossom.



THIRTY-FIVE—J. J. Mulroy, SD Dept. 292-3, early this month became the second man to claim recognition for his 35-years' service with Convair.



UP AND OVER—Mary Gengler, brown belt winner, and Ray Ekhamel (Dept. 25) take spill at CRA-sponsored judo session in CRA Clubhouse on Pacific Hwy. Sessions are held, under surveillance of instructors, every Thursday at 7:30 p.m.

150 Attend Big Game Drawing for Hunters

Over 150 Convair SD and Astro hunters jammed the CRA Clubhouse at Gillespie Field Nov. 10 for the annual Big Game Drawing sponsored by the CRA Gun Club.

Ten merchandise awards were made. Eligible for the drawing were hunters successful in bagging big game. Jack Swank, commissioner, reports that over 100 entries of deer and elk were registered. For the record, judging from the entries, the best hunting grounds are Utah, California, and Colorado, in that order.

Although winners were chosen on a luck basis, the top prize (.22 pistol and holster) went to the best entry, a 14-point deer, brought down in Utah by F. J. "Bud" Hammack (Dept. 137).

Other Convair SD winners in the drawing were: H. D. Musick (Dept. 7), Sam Stearns (Dept. 280), Jack Rogers (Dept. 6), Earl McDaniel (Dept. 402), Mike Alianelli (Dept. 223), Ed Green (Dept. 206). Astro winners were C. J. Cull (Dept. 321-1) and Blas Vargas (Dept. 773).

In addition, turkeys were door prizes at the meeting and also prizes at a CRA shoot. Winners included Jerry Smucker (Dept. 537), Vince Cernuto (Dept. 2), R. D. Hughes (Dept. 321-1), and Gerry Cox (Dept. 101).

Next Gun Club event slated is a "silver bird" shoot Dec. 6, starting at 9 a.m. at the CRA Range, Gillespie Field. Boxes of candy and nuts will go to "silver bird" shooters in each squad.

SD, Astro Archers Snare Ten Turkeys

Ten archers from Convair SD and Astronautics won turkeys at a special Thanksgiving shoot Nov. 15 at the Singing Hills Range.

Class winners in the morning field round were John Platt, Bob English, Tom Boling, and Jim Bence. Later, in the novelty shoot, turkeys were won by Oliver Phipps, Wally Butts, Dale Jennings, "Red" Bangsberg, Marshall Stomghton, and Ruth Ribby.

Loss of the Kearny Mesa field range has sent the archers in search of a new facility, J. B. Bence, club spokesman, reports. Until a permanent location can be found, arrangements will probably be made with other clubs in the area.

Best Card Designs Subject of Contest

Best designs in a Christmas card contest sponsored by the Convair SD Art Club will be awarded merchandise awards at a meeting Dec. 15 at 7:30 p.m. in the Convair studio, Spanish Village, Balboa Park.

Entries are being accepted from Astro artists as well as those at Convair SD. The designs should be original. Watercolor, charcoal, oils, pen and ink and other art forms can be used.

Judging will take place at the Dec. 15 meeting and awards will go to the top three entries.

The meeting is also the deadline for memberships in the club. If not enough artists sign up, the club will be discontinued by CRA at Convair SD.



SCRIPT TIME—Vi Pohlenz of Astro's Vandenberg AFB force recently won part in first show to be staged by Santa Maria Civic Theater Group.

Convair Girl Wins Role in 'Tender Trap'

VANDENBERG AFB — Vi Pohlenz, receptionist at Astro's employment office in Santa Maria, has won a top role in "The Tender Trap" to be staged Dec. 9, 10, 11 by the Santa Maria Civic Theater Group.

The new group will present its initial production at Santa Maria's Alvin Street School.

Two From Convair Share Play Honors

Two Convair employees, one from Astronautics, the other from San Diego Division, were instrumental in a second place in the annual original one-act Play Festival held recently in Balboa Park.

San Diego's Norma Marr directed and Astro's Rocky Caggiano starred in "Threnody for Gino" judged second in the Festival.

AIR FORCE RESERVES INVITED TO CLASSES

Air Force Reserve officers at Convair SD and Astro interested in attending classes in aircraft propulsion held Thursdays at Fort Rosecrans, between 7:30 and 8:45, should contact Maj. Stefan Bagrowski at CY-6-3346.

Basketball Tourney Set For SD, Astro

Shop league basketball teams at both Convair San Diego and Astronautics will be matching shots in a special pre-season tourney.

Entries from departments at both plants are being accepted now. Deadline is this Friday (Nov. 27). Tourney action is tentatively scheduled to start the week of Nov. 30.

Team rosters should be turned in to employee services by deadline time. Plant teams at Astro can contact Elaine, ext. 1111; shop leaguers at Convair SD should register with Gil Crosthwaite, ext. 1245, after 1 p.m.

Five Years Ago...

Following are brief excerpts from Convairiety of five years ago:

★ ★ ★

Lufthansa, West German airline, takes delivery on first two of four Convair Model 340s.

* * *

Air Force allots additional funds for testing and production of B-58 at Convair Fort Worth.

* * *

John Doig is appointed night manager of Plants 1 and 2 at Convair SD.

* * *

Thomas G. Lanphier Jr., Convair vice president, is re-elected president of National Aeronautical Association for 1955.

* * *

"Convair SACseat," new type ejection chair, is designed at FW for B-58.

Leatherneck Bowl Tickets on Sale At Both SD, Astro

Tickets for the second annual Leatherneck Bowl football game, pitting San Diego's MCRD Bulldogs against the Bolling Air Force Base Generals Dec. 6 in Balboa Stadium, are now on sale at employee services at both Convair SD and Astronautics.

Game time is 1:30 p.m. No discount on the regular $1.25 ticket price is being offered because all proceeds will go to charity: 50 per cent to the United Fund of San Diego; 50 per cent to be split by the Air Force Aid and Navy Relief Associations.

The tilt is billed as probably the best football game to be played in San Diego this year. Each team is defending champion in its service league. During the last four seasons, the Generals have amassed a sparkling won 44, lost 3 record. The Bulldogs have won 46 games, lost but 6, over more than four seasons.

Ski Classes Are Offered

Adult and junior beginning skiers at Convair SD will be able to take advantage of ski instruction classes sponsored by the downtown YMCA at CRA-reduced prices.

Both junior and adult classes are held each Thursday for six weeks. Juniors meet at the downtown YMCA, 8th and C, between 5:30 and 7:30; adults are scheduled between 8 and 10 p.m.

Four of the classes are of the "dry run" variety, emphasize fundamental ski positions and body conditioning. Students get a chance to practice theory during two special trips to Big Bear.

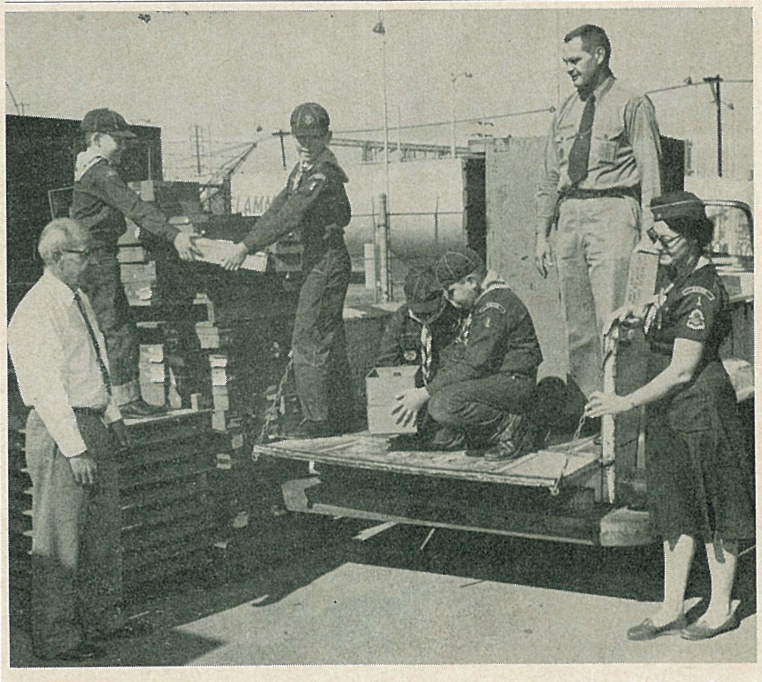
Classes are taught by Joe Harris, CRA Ski Club commissioner, and Mike Lund (son of Harry Lund, Dept. 8). With CRA sponsorship, adults pay $9; juniors $7. Regular prices are $14 and $11.50. Registration for the classes is now open. Contact Joe Harris, ext. 2443, Plant 1.

Pomona Son to Head Squadron For CAP

Harry R. Williams, 18, son of Convair Pomona's Mr. and Mrs. M. E. Williams (he's in Dept. 72, she's in Dept. 63), has been appointed cadet commander of Old Baldy Squadron 59 of the Civil Air Patrol.

VANDENBERG PAIR MARRIED NOV. 8

VANDENBERG AFB — Wedding bells sounded Nov. 8 for Marlene Manfrina of Dept. 576-6 here and Marvin Grossi of La Olivos. The newlyweds will reside in Solvang.



BOXES FOR SCOUTS—Cub Scouts from Pack 1, Chino, load salvage boxes on truck under eyes of Ray Landolt, left, disposal assistant foreman at Convair Pomona, and Mr. and Mrs. D. C. Baughman, cubmaster, and den mother. Boxes were abandoned by Navy and donated for use by scouts in handicraft programs. Larger boxes will be used by newly formed Explorer Post 4, Ontario, to make emergency disaster trailer.

Barger Leads CRA Golfers

Golf entries are now being taken at ext. 1705, Plant 1, for the next Convair SD CRA sweeps to be held Dec. 5-6 at Flying Hills. Deadline is Dec. 2.

Results of the tourney Nov. 7-8 over the long south course at Torrey Pines saw Vic Barger (Dept. 280) take low gross honors with a 76, followed by Stan Gmyr (Dept. 15) with 78. Low net honors in the 0-13 handicap group went to Ed Kerfeld (Dept. 31) with a 71, and Bob Vones (Dept. 603) who handicapped a 74.

Winners in each handicap group won turkeys; runners-up received golf hats.

In the 14-20 handicap bracket, Mel Robinson (Dept. 280) and Frank Meer (Dept. 14) placed first and second, respectively, with low gross scores of 81 and 85. Low net awards went to Bob Shannon (Dept. 180) with 65, and Bob Stegall who handicapped 72.

A low gross of 92 took top honors in the 21 and over handicap group for Roy Sommers (Dept. 15). Runner-up was Lin Richardson (Dept. 401) with 96. Harold Wilson (Dept. 15) placed first in the low net group with a 63, followed by J. McCafferty (Dept. 6) with a 71.

HOEDOWNERS GET TWO NEW CALLERS

Bob Dennington (SD Dept. 25) and Don Browne have been enlisted as new callers for the Convair SD Hoedowners, P. E. Liggett and "Maury" Scholz, CRA commissioners, have announced.

Browne will call for the Tuesday night classes at the University Heights Community Center; Dennington, a Hoedowner for the past five years, will instruct beginners at the Monday evening sessions at American Legion Hall.

They will share the mike at the club's regular party night on the fourth Saturday of the month at the Community Center, 4044 Idaho St. "Let's Dance" is the theme for the next party night this Saturday (Nov. 28) which starts at 8 p.m.

Discount Available For Santa's Village

Special coupons entitling Convair San Diego folk to discount prices at Santa's Village are available at employee services, Plants 1 and 2.

Santa's Village is on Hwy. 18 (near Lake Arrowhead). It's described as the "year-'round home of Santa Claus."

Two book plans are offered. Book "A" costs $1.65, includes one adult admission and five rides or theater tickets. Regular price is $2.25. Book "B," priced at $3.80, consists of two adult admissions, eight rides or theater tickets, choice of food (for $1) and Santa Claus book. Its regular price is $5.25.

Meetings Changed For Car Clubbers

Meetings of the Convair SD Sports Car Club will go on a once-a-month schedule starting Dec. 2 at the Natural History Museum, Balboa Park. They will continue to be held at 7:30 p.m. on the first Wednesday of the month only.

Tom Jackson, club spokesman, reports that a schedule of activities for the next year has been mailed to all members. Details for a December Hare and Hounds event, under chairmanship of Skip Carpenter, will be formed at the Dec. 2 meeting.

CONVAIR SD COUPLE MARRIED THIS MONTH

Catherine Whisler and L. E. Woll, both of Convair SD Plant 2, were married Nov. 7 in the Hillcrest Chapel at San Diego. Mrs. Woll had been in Plant 2 employee services until her marriage while Woll is in educational services. The couple will make their home in Chula Vista.



LOOK IT OVER—Swapping session and coin auction highlighted meeting of CRA Coin Club last month. Club usually meets the third Tuesday of month at 7:30 p.m. in Hearing Aid Society Building, 3843 Herbert St.

CRA Sports & Recreation Convairiety

Dry Winds Wilt Many Blooms, Cut SD Show Entries to 100

Six turkeys went to best of show winners at the annual Chrysanthemum Show of Convair SD Garden Club held Nov. 8 in the Floral Association Bldg., Balboa Park.

Winning Thanksgiving birds were Mrs. Verna Iverson (wife of Marvin Iverson, Dept. 407) for the prize-winning one-bloom chrysanthemum; Mrs. Eleanor Hernandez (wife of D. M. Hernandez, Dept. 31), three blooms; Mrs. C. H. Splinter (Dept. 1-16), pompon; Grace Zimmerman (wife of E. L. Zimmerman, Dept. 402), button mum; Mary Bohler (wife of R. A. Bohler, Dept. 6), arrangement; Ann Freedman (wife of Richard Freedman, Dept. 6), corsage.

John Bohler took best of show in the children's division in competition with his brother, Bob.

At least 1,000 spectators visited the Floral Association Bldg. during afternoon hours to view the Garden Club's last show of the season, reported Zimmerman, CRA commissioner.

"Although the 100 entries were less than we usually display," he said, "we feel that members can feel satisfied with a successful show."

Hot winds of the week before the event dried up many of the blooms tabbed for exhibit, he explained.

★ ★ ★

CRA Garden Club members and families will gather on Dec. 9 for their annual Christmas party at 7:30 p.m. in the Floral Association Bldg.

Everyone attending is reminded to bring a gift suitable for his own sex and age, thus children will bring a gift for a child, etc.

'Ham' Directory in Engineering Library

A draft copy of CRA's new "ham" directory of FCC licensed amateur radio operators is now on the shelves of Convair SD's engineering library in Bldg. 5.

J. B. Baker, CRA commissioner of Convair SD Radio Club which is compiling the directory, said that a working copy will remain permanently in the library's reference collection. It will have space for Convair radio operators to volunteer information to keep the directory accurate and up-to-date.

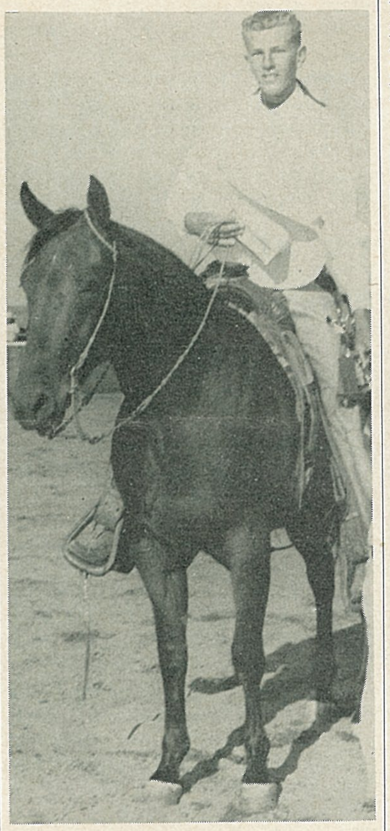
Baker said the directory, which now includes the names of about 150 licensed radio operators, could be of extreme value in case of emergencies when "hams" provide the only means of communication during earthquakes or other disasters.

Final printing of the 1960 directory is scheduled for Dec. 15.

Free Flight Meet For Aeromodelers

Aeromodelers at Convair SD will stage a free-flight contest Dec. 13 at the Clairemont-Mesa Blvd. field starting at 8:30 a.m.

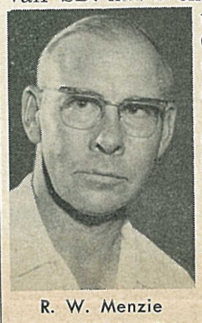
Gary Witt, club spokesman, said free flight models of all classes and types will be eligible to compete. A Christmas turkey will be the prize in a special drawing.



TOPS—Skipper Newman, 15, son of Louis Newman (Dept. 600-2), has entered Convair horse shows for past seven years. This year, in local competition, he has garnered 40 firsts, 20 seconds, 19 thirds, and 20 fourths. His horse is Camelot Minute, grand champion registered quarter horse mare at San Diego County Fair Horse Show.

Menzie Named Fishing Club Commissioner

Robert W. Menzie (Dept. 402 0), a 19-year veteran with Convair SD, has been appointed commissioner of the CRA Fishing Club at Convair San Diego.



R. W. Menzie

J. K. Field, employee services chief, said Menzie will succeed H. D. Cromartie who has been commissioner of the club since January, 1957. Cromartie has transferred to Astronautics.

Menzie has been a member of the Fishing Club since its inception as a CRA organization in 1949. He has served as both chairman of the Fishing Club and of the contest committee. In addition, he has been Convair SD's delegate to the San Diego County Wildlife Federation, and recently was elected treasurer of the group.

A native of Minnesota, Menzie attended Iowa State College at Ames, and came to California in 1937. He lives with his wife, Ruth, and two children, Linda, 15, and Gordon, 17, in North Park.

Meeting Cancelled By SD Bridge Club

The Dec. 1 meeting of the Convair SD Bridge Club has been cancelled because of the national bridge tourney in Coronado, Frank Westphal, club spokesman, reports.

The club will revert to the regular routine later in the month. Meetings the third Tuesday (Dec. 15) and fifth Tuesday (Dec. 29) will be held as usual. The Dec. 15 meeting will be both a master points session and Christmas party.

A few Convair SD bridge enthusiasts are expected to enter the industrial pair championship event this Sunday (Nov. 29) at the Hotel del Coronado where the American Contract Bridge League is holding its annual Fall Nationals.

More Basketball Players Needed

Experienced basketball players are still needed for Convair SD's hoop entry in city competition.

Any interested players are urged to act promptly. A city pre-season tourney is slated to start Nov. 30. Information can be obtained on practice times and locations by contacting Gil Crosthwaite, ext. 1245, Plant 1, after 1 p.m.

SD BASEBALLERS SLIP TO SECOND

A victory and defeat has dropped Convair SD's baseball entry in the San Diego City League into second place with an overall record of three wins and one loss.

After romping to easy victories in their first two games, Convair collided with Haynes Streamliner and went down under a deluge of runs in the fifth inning 9-0. The Streamliner team drove Convair pitcher, Bill Murphy, out of the box in the fifth with a seven-run uprising.

Convair bounced back the next weekend and clipped the Lemon Grove Merchants 5-2. John Doughty broke a 2-2 tie in the sixth inning with a double that sent two men home. Murphy pitched the entire game for Convair. John Hartsell aided the cause with three singles in four times at bat.

On Nov. 22 the SD hardballers met Ryan in a game that will decide the first round leader of league play. Second round competition starts Nov. 29 when Convair meets the MCRD Bulldogs at MCRD. Dec. 6 they meet the Cardinals at Helix Field. Game time is 1:45 p.m.

Close Scores Mark Pistol Club Shoot

Keen competition, evident in close scores, continues to mark Pistol Club shoots at Convair SD.

B. L. Broadway (Dept. 603) registered a one-point victory in the master class, edging Joe Williamson (Dept. 401), 287 points to 286. Other winners in the Nov. 8 shoot were R. D. Miller (Dept. 600), who took expert class honors and Bill Mentlick (Dept. 406), sharpshooter winner. Runners-up were Carl Hornburg (Dept. 166) and R. G. Lair (Dept. 406).

Williamson topped entries in the short national match event, tallying 262 points. Jim Halfacre (Dept. 180) placed second with 260; Ralph Picard, third, with 255.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports call CRA headquarters, ext. 1245, Plant 1.)

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AEROMODELERS — Free-flight contest Dec. 13 at 8:30 a.m., Clairemont-Mesa Blvd. field.

BASKETBALL — Shop league pre-season tourney to start week of Nov. 30.

BRIDGE CLUB — Dec. 1 session has been cancelled.

CHORALAIRES — Rehearsals each Monday evening at 7:30 in CRA Clubhouse on Pacific Hwy.

GARDEN CLUB — Christmas party Dec. 9, 7:30 p.m., Floral Association Bldg., Balboa Park.

GOLF — Entries now being taken at ext. 1705, Plant 1, for CRA sweeps Dec. 5-6 at Flying Hills. Deadline is Dec. 2.

GUN CLUB — "Silver bird" shoot starts 9 a.m., Dec. 6, CRA Range, Gillespie Field.

ICE SKATING—Convair night every Tuesday and Thursday; discount rates between 6:30 and 8 p.m., at Iceland, 6055 Lake Murray Blvd.

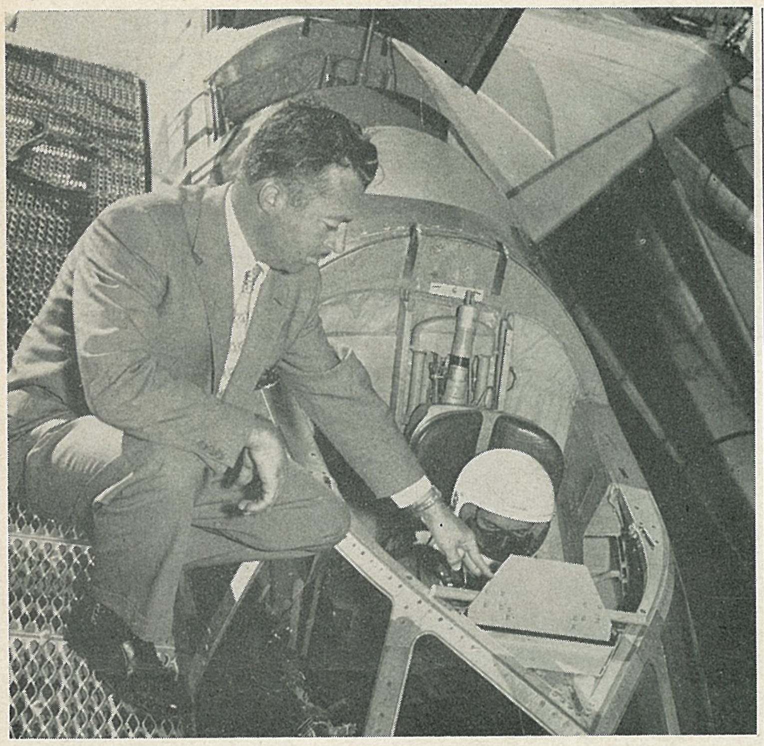
JUDO—Workouts every Thursday, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

MOVIES — Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Dec. 1 — "Soldier of Fortune," and "Old Man and the Sea." Dec. 8 — "Hell on Frisco Bay," and "War of the Satellites." Admission: adults, 25¢; children, 15¢.

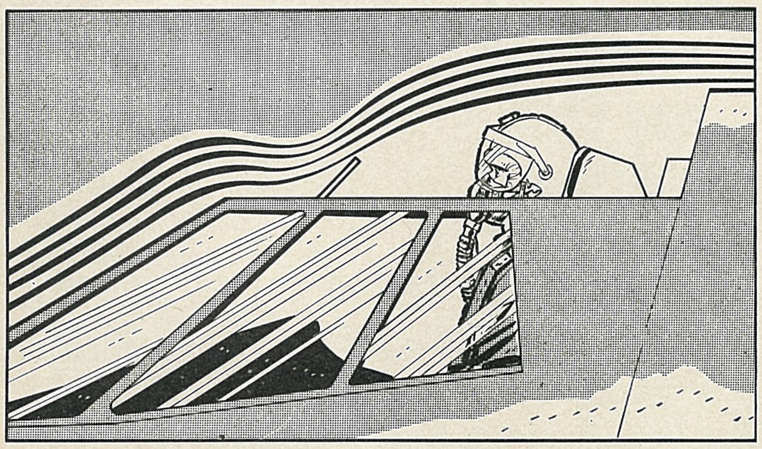
RADIO CLUB — Meeting tomorrow (Nov. 26), 7:30 p.m., Harbor Drive Headquarters.

SPORTS CAR CLUB—Meeting Dec. 2, 7:30 p.m., Natural History Museum, Balboa Park.

SQUARE DANCING — Party night this Saturday (Nov. 28), 8 p.m., University Heights Community Center, 4044 Idaho St.



"CONVERTIBLE"—B. A. Erickson, manager of flight at Fort Worth, flew B-58 recently without canopy, to determine speeds pilot can withstand if forced to fly under these conditions. Charles Harrison, Dept. 6, points to deflector device being developed for use in emergencies.



WIND FLOW—Deflection of wind in uncanopied B-58 is illustrated in sketch drawn by Dub Ballow, FW Dept. 6-5. Pilot's seat is elevated to highest possible point, yet deflector shields pilot.

It's Drafty But Possible, Erickson Finds on B-58 Flight Without Canopy

B. A. Erickson, manager of flight at Convair Fort Worth, took an "open air" ride in the B-58 Hustler recently and found it "drafty but tolerable."

Purpose of the flight, with pilot's canopy removed, was to test a wind deflector attached to the top of the B-58 windshield. The deflector would be used in emergencies if the pilot finds it necessary to eject the canopy and fly without it. Conceivably, this might be advisable in making a landing under adverse conditions.

Procedure would be to eject the canopy and raise the pilot's seat. The deflector would slant the wind over the pilot's head, permitting him to see over the top of the windshield.

Erickson admits he is not eager to try the device at Mach 2, but reports that conditions were "tolerable" at speeds sufficiently high to simulate emergency conditions where the deflector would be used.

So the deflector, nicknamed "Barney Oldfield" after the famous auto racer, was a success.

Did the pilot enjoy his "sporty" jaunt?

Well, it was a little drafty. Erickson cautions anyone anticipating a B-58 convertible ride to be sure there are no loose papers around the cockpit.

"And the noise was not negligible," Erickson understates, recalling the wind rush around his head. "In fact, you could safely say it was deafening."

But the uncanopied airplane beats a sceni-cruising bus when it comes to sightseeing. "Visibility profound" is the flight manager's description.

All things considered, Erickson is hesitant about endorsing the B-58 convertible for summer afternoon rides through the country. He still prefers the hard top model!

Manufacturing Development Post At San Diego Assumed by Famme

J. H. Famme, former Convair SD works manager at Plant 2, has been named to the new post of director of manufacturing development for Convair, effective this week.

In announcing the appointment, J. V. Naish, Convair president, said that Famme, as director, will be responsible for broadening the manufacturing development activities to include value control.



J. H. Famme

Said Naish, "It is of utmost importance that we design and build top quality products at the lowest cost if we are to maintain our competitive position."

Famme will report to R. C. Sebold, Convair vice president—engineering. T. E. Piper was appointed assistant to the director of manufacturing development and will report to Famme.

A native of Baltimore, Md., Famme joined Convair SD engineering department nearly 24 years ago and had been works manager at Plant 2 during the last year.

★ ★ ★

Value control work within Convair SD is being directed by M. R. Yale, now on special assignment, reporting to R. P. White, assistant chief engineer—product design.

P. F. White is acting senior body group engineer while Yale is on special assignment.

Astro Con-Trib Will Furnish Hospital Rooms

Three patients' rooms in San Diego area hospitals will have complete furnishings, thanks to the generosity of Astronautics Con-Trib-Club members.

Money for this purpose, as well as several other disbursements, was voted recently by the Astro Employees' Con-Trib-Club Committee.

Some $2,000 was allocated for patients' room furnishings of both the Heartland Hospital Association and Grossmont Hospital. Another $1,000 was given for the same purpose to the Fallbrook Hospital.

In addition, Hillside Hospital received $1,850 toward purchase of a bookkeeping machine; Palomar Hospital received $900 to provide an Isolette; and Edgemoor Geriatric Hospital received $1,650 to provide needed items.

In other action the committee approved expenditures of: $250 to the Eugene Wuesthoff Memorial Hospital Association; $2,500 to the Salvation Army; another $1,000 for the Salvation Army; $1,000 to the City Rescue Mission; $1,100 to the Sheltered Workshop; $1,000 to the San Diego County Association for Retarded Children; $1,000 to Guadalupe Clinic; $1,500 to the Sunnyside Guild; and $500 to San Diego Children's Home.

Title Changes Affect Astro

Several appointments within the Convair Astronautics communication department have been announced by Charles T. Newton, communication manager.

Howard O. Welty, formerly chief of editorial, now reports to Newton as his assistant and senior editor with responsibility for quality control of information generated in all communication sections.

Ray T. Blair becomes acting chief of editorial in addition to his duties in community relations and arrangements.

Worth Larkin is joining Astro to assume primary responsibility for public information, reporting to Blair.

Henry L. Montgomery shifts to base activation and is slated for duty at Offutt AFB where he will serve as communication representative. This is expected to take place about Dec. 1.

Harold P. Conroy, now communication representative at Vandenberg AFB, returns to Astro approximately Jan. 1. He joins community relations and arrangements as coordinator of off-site communication representatives, also reporting to Blair.

TOP ASTRO PHOTOS GO ON EXHIBITION

Photographic artistry by Astronautics' still photographers is drawing attention these days to the Exhibition Gallery, Spanish Village in Balboa Park.

Twenty-three prints made by Astro photographers were entered in the Professional Photographers of America convention in Los Angeles recently.

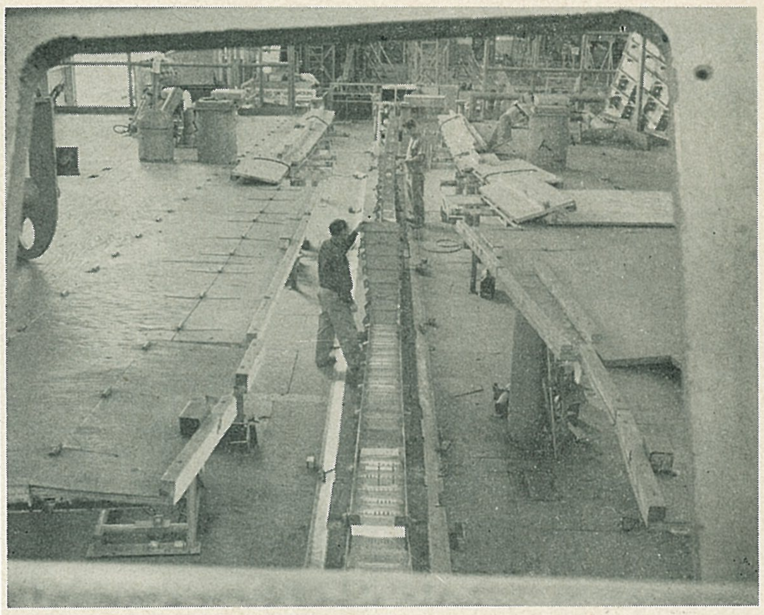
All prints entered are being shown from 1 until 5 p.m. on weekends and holidays through November.

The prints are the work of Keith Adams, Walter Gault, Henry Kierstead, Jack Stevens, Robert Ries, Bob Weissinger and Ted Winfield.

Convair President Talks to Accountants

Jack Naish, Convair president and senior vice president of General Dynamics Corporation, was main speaker before nearly 300 members of the San Diego chapter of National Association of Accountants Nov. 11.

Naish's subject was "What Management Expects of the Accountant."



SPROUTING WING—G. B. Bascue and D. C. Block, Convair SD assemblers, place bulkheads in spar as first Convair 600 wing sections take shape in bucks at SD Plant 1.

Wing Assembly For 600 Well Under Way at SD

Spars for the wing sections of the first Convair 600 have been laid in the wing bucks in Bldg. 2, Convair SD Plant 1.

Bulkheads are now in place in the right and left-hand spars and work is well under way on assembly of the first 600's wings, said E. L. Wallin, wing structure foreman.

According to C. W. Clark, in charge of 880 and 600 wing assembly, the wing sections are slated to come out of the bucks the latter part of December. They are due to go into the Scotchweld oven the first part of January. Second set of wing sections for the next 600 jet transport will follow on the heels of the first in the bucks.

Two bucks, a right and a left-hand one, have been modified to handle the wings of Convair's newest jet airliner. Changes in wing control surfaces, location of landing gear points, as well as the heavier structure of the 600 wing made the buck modifications necessary. Length of the 600 spars, however, is identical to that of 880s—60 feet.

Work on Convair 880 wings will proceed simultaneously in the other four bucks with that on 600 wings.

Photographers Will Shoot B-58s From 'Nine-Story High' Tower

Photographers shooting B-58 takeoffs from a 50-foot tower needn't fear that new B-58 production run stations at Convair Fort Worth might block their sight.

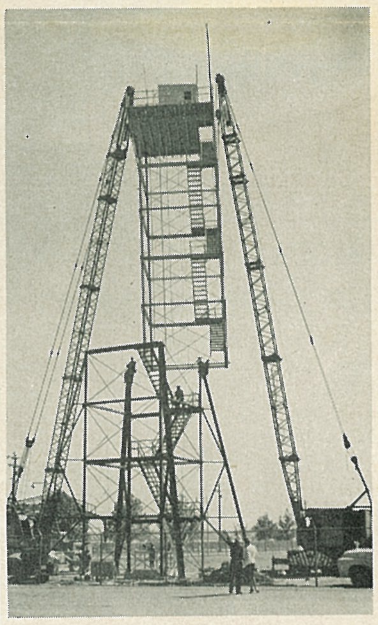
The tower has been picked up bodily and moved atop a 40 foot base to make it 90 feet high—about the height of a nine story building.

Photo lab's flight test group shoots takeoffs from parking lot No. 1, aiming across Grant's Lane to the runway. The run stations were being erected directly in their line of sight.

So, a new base was built under the direction of Shep Lampkin, field engineer in plant engineering.

Photographers now have a lofty and unobstructed view of the reservation, with nothing in between.

Photographer Jimmy Hicks, one of the first to scale his way to top of the tower, says there are 123 steps. So far, no one disputes him.



TALLER TOWER—Giant cranes lift motion picture tower atop new base, making total tower height 90 feet.

Thailand Training Director Briefed at San Diego During Tour of U.S., England and Philippines

Dr. Thavil Kuptabutra, Thailand director of training for department of livestock in that country's ministry of agriculture, was briefed on Convair San Diego's training program during a recent visit.

Through arrangements with the American Society of Training Directors, SD educational services explained its program as it pertains to supervisory development and office management. H. W. Rubottom, chief of SD educational services, R. H. Nall, and M. S. Lachman are Society members.

Nall conducted Dr. Kuptabutra on a tour of Convair SD Plant 1 and W. H. Goggin showed him Plant 2 facilities during the last day of his stay in the San Diego area, Nov. 13. The Thailand official is on a several-month tour of the United States, England, Japan, and the Philippines to observe training methods which could be applied to organization of Thailand's public administration training program.



VISITOR—Dr. Thavil Kuptabutra of Thailand is shown interior of Convair 880 by R. H. Nall of Convair SD educational services during recent visit.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

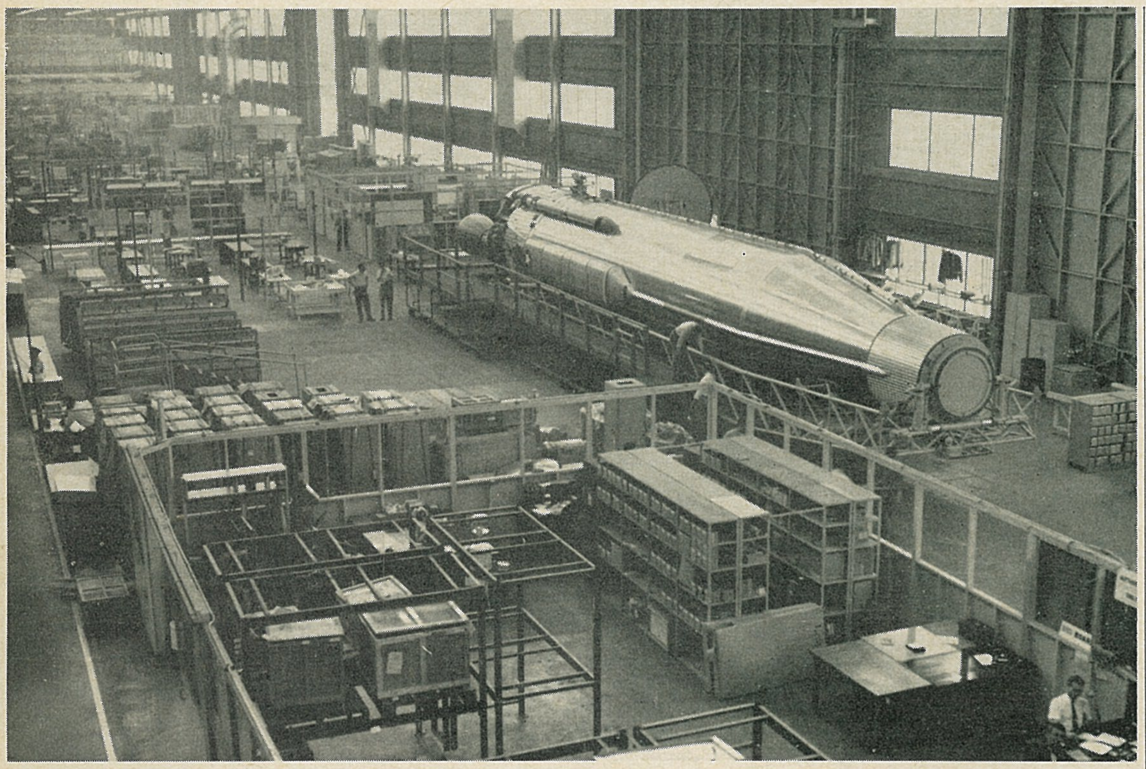
Convairiety

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San Diego EDITION (Serving Convair San Diego)

San Diego news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



LATEST ADDITION—Through years Plant 2 has known many types of aircraft, but saw something new recently in this Atlas missile located in "A-B" bay. Missile will be converted to training configuration for transportation to Sheppard AFB, Texas, an Air Force crew training center.

Missiles Modified at Plant 2 For Use in Training AF Crews

Two Atlas missiles, both veterans of Astronautics static firings, will receive a new lease on "life" for still another important task—training of future ballistic missile crews.

Modification work on the first of the two "birds" is now in progress in Astro's support center, a product support department function, in Bldg. 3, SD Plant 2. Work is being performed by crews reporting to Supt. J. M. Rogers.

Shortly after the first of the year the first modified Atlas will be shipped to Sheppard AFB, Texas, where it will be used by Air Force trainees taking individual training in Atlas missile operations. The second missile will follow the same routine at a later date.

Astronautics is adding to and altering the missiles with such systems and components necessary to bring them up to full initial operational capabilities.

At the Wichita Falls, Texas, base they will be used with Convair-designed training units which will allow trainees to conduct check-out operations, conduct pre-launch procedures and even stage "mock" countdowns. The "birds" will lack only the ability for actual launch.

Sheppard AFB, already "home" to a growing group of Astronautics employees, will be one of two training bases operated by the Air Force. Men there will learn such skills as necessary to prepare them for crew training at Vandenberg AFB.

Veteran Convair Men Assigned to Astro Base Dept.

Appointment of W. P. Woods as activation works manager and selection of a veteran staff of Convair executives to report to him in Astronautics' new base activation department has been announced by A. F. Higgin[illegible] activation manager.

In his new post Woods will be responsible for planning, liaison, operations, logistics, projects and service phases of the base activation program for Astro.

Reporting to Woods will be: C. C. Pope, chief of activation projects; S. E. Chavez, chief of activation planning; W. T. Lacy, chief of logistics and service; and E. J. Huntsman, chief of activation operations.

Woods, Pope and Lacy are transfers from Convair SD, while Huntsman and Chavez move to new assignments within Astronautics. The five men represent more than 83 years of Convair service among them.

Woods has been chief tool engineer at San Diego's Plant 2 since late 1952. During this period the F-102 and F-106 interceptor programs were at their peaks. He moved to San Diego from Convair Fort Worth after working more than seven years there in various supervisory capacities. He headed Fort Worth's largest tooling section, later (Continued on Page 2)

Follow-on Order For Radar Placed

A half-million dollar order has been received by Convair San Diego from Autonetics Division of North American Aviation, Inc., for manufacture of spares for the radar systems now under construction by SD electronics.

The follow-on order is in addition to the original $2 million contract announced last summer for design and construction of a number of radar systems to be used in the A3J carrier-based attack bomber. The plane is being built for the U. S. Navy at North American's Columbus, Ohio, division. The new contract calls for delivery of spares within the next six months, said J. E. Bowen, electronics project engineer.

First prototype model was completed in SD electronics factory under E. W. Carlson and delivered to North American last month. Delivery of production units is scheduled to start the middle of this month. The systems will be turned out at the rate of one every two weeks in San Diego's electronics production facility.

Approximately 165 electronics people, both in engineering and production, are occupied in the project, said Bowen. Other SD departments, including experimental and thermodynamics group of engineering, have given assists.

The improved type of radar, being built at Convair SD, provides increased power for longer range and higher resolution so that close targets can be individually distinguished, explained Bowen. The system's terrain-avoidance function, which provides for an image on the cathode-ray tube indicator of any obstruction, such as a mountain or high tower, protruding above a certain clearance line under the plane, is named as one of its greatest advantages over other systems.

Kennedy Wins RX's $2,000 Grand Award

Don W. Kennedy, a foreman in Dept. 116, is the winner of the $2,000 "RX" campaign Grand Award, B. F. Coggan, Convair vice president and SD manager, has announced.



D. W. Kennedy

At the award presentation last week, Coggan said Kennedy's proposal was judged the best of the four monthly $1,000 "RX" winners.

"The 'RX' awards committee took into account many factors, such as the future potential, uniqueness, the estimated dollar savings, etc., of the top four proposals," Coggan added. "Application of Kennedy's cost-cutting idea was judged the most likely to continue saving Convair dollars over the long run."

Kennedy won the first of the four monthly awards. To win the April top prize, he recommended that several potted harness assemblies used on 880 and 600 programs be manufactured at Convair SD, instead of being handled on a sub-contract basis.

The three other monthly winners were Ralph De Sola (Dept. 6), R. E. Gumtz (Dept. 321-1) and Francis N. Gagnon (Dept. 321-2). Together, the top four proposals are expected to save Convair an estimated $91,000 during the first year of installation.

"Although Kennedy's idea was judged the best, 4,500 other Convair San Diego persons who participated in the 'RX' campaign deserve a special word of thanks and appreciation," Coggan added. "With their support, the 'RX' drive has saved Convair over $1,200,000."

Convair to Build New Type Antenna, Delivery in Fall

Work is under way at Convair San Diego under a $196,000 contract for the design and development of a new type of antenna suitable for use in the F-106.

Eighteen of the new ultra-high frequency data link antennas are to be completed by the fall of 1960 for the Wright-Patterson Development Center, Dayton, Ohio, under an Air Force contract. A three-month flight test program will follow.

Work is being done in the electronics department's antenna laboratories under supervision of George Wolfe, radiation design and development supervisor. D. L. Hill has been named electronics project engineer.

The Convair-developed antenna will be the receiving portion of the link between the ground environment (SAGE) and the Convair-built fighter-interceptor. It will be designed to provide improved operation of the present data link.

SD Activates New Dept. To Build Pods, Pylons

A new department has been activated at Convair San Diego with sole responsibility for building pods and pylons for the new Convair 600 jet transport.

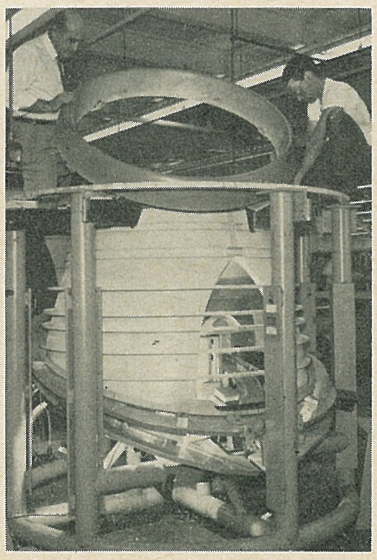
The 600 pod, pylon, and engine buildup department (Dept. 140) will occupy 33,000 square feet on the east side of Bldg. 4 at Plant 1, between Cols. E-23 and E-38 where tooling fixtures are now going into place.

W. S. Nader and C. W. Clark, as Dept. 140 foremen, will supervise the work, reporting to F. E. Grossher, jet transport wing superintendent. First assistant foreman assigned to the new department was E. H. Ulsund with further appointments to follow.

At present, approximately 25 men have been drawn from production departments in Plants 1 and 2 to form the nucleus of the new department. A peak employment of 200 trained personnel is anticipated by the first of the year when pod and pylon production hits its stride, said Nader.

Tooling at SD (Dept. 401) is well along in construction of tools for pod components—doors, nose cowl, fan duct, fixed nacelle, pylon parts, and subassemblies. Sixty-two fixtures will be needed for major assemblies for two ships' sets—eight pods and pylons—to be turned out in one month at the start of production buildup. All fixtures and tools were designed by SD tool design.

Dept. 140 personnel began work last month on the department's first project, assembly of two 600 test pods due for completion the end of this month. The test articles will go to Edwards AFB the first of the year for installation on the RB-66 flight test plane for checking out the General Electric CJ-805-21 aft fan engines which (Continued on Page 2)



FIRST 600 POD—W. S. Nader, Dept. 140 foreman at Convair San Diego, and B. D. Marries fit leading edge on nose cowl of first Convair 600 pod to be produced at SD Plant 1.

Material Service Division Foreseen In Move to Merge

NEW YORK — Directors of General Dynamics Corporation and Material Service Corporation of Chicago last month announced the signing of an agreement calling for the merger of Material Service Corporation into Dynamics as the Material Service Division, subject to approval by share owners. Meetings of share owners of both corporations have been scheduled for Dec. 29.

The basis of the Agreement of Merger, reflecting revisions of the terms contemplated by both corporations at various times during the period of negotiation, is set forth in a letter to Dynamics share owners from Frank Pace Jr., chairman of the board of directors of General Dynamics. The letter prefaces a proxy statement mailed to Dynamics share owners.

Los Angeles to Be Home Base When 880s Go Into TWA Service

Los Angeles will be home base for all Convair 880s destined for Trans World Airlines, Ray Dunn, vice president of technical operations for TWA, told members of Convair SD supervision this month.

Dunn discussed TWA plans for the Convair 880, emphasized that according to present 880 routing schedules over the airline's network, the 880 must be capable of flying between major checks with a minimum of work and permit prompt analysis and isolation of mechanical malfunctions.

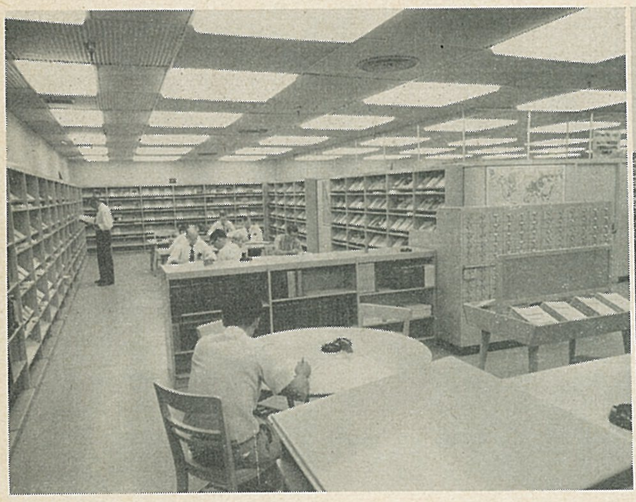
Dunn's presentation was arranged by B. F. Coggan, Convair SD manager. In his introduction, Coggan pointed out the need for increasing customer understanding among all Convair departments.

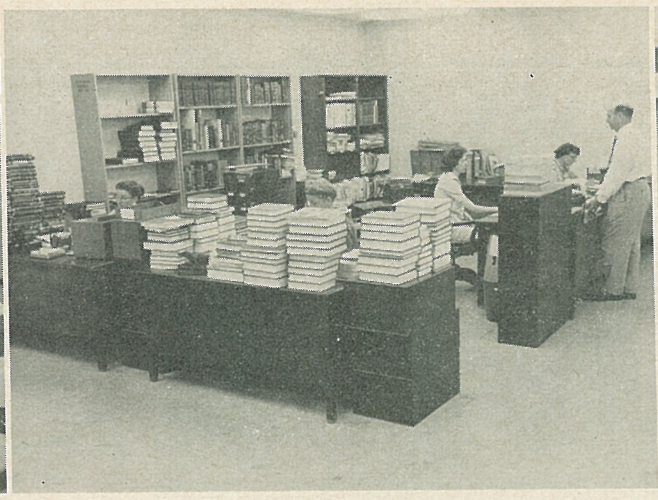
"Everything possible must be done to service TWA," Coggan said. "Success of the jetliner program will depend a great deal upon the initial 880's performance with our customers."

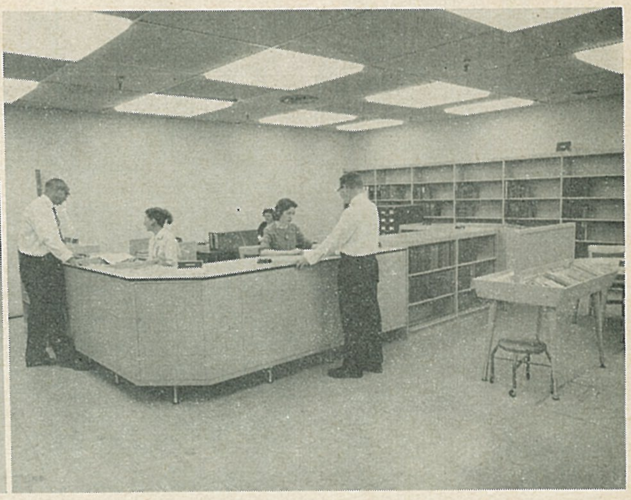
In his opinion, Dunn said, a safe and profitable introduction of the 880 with TWA would be an extremely effective sales tool which would keep Convair production lines rolling.

The TWA vice president stressed the need for technical excellence and reliability. He said the TWA system of servicing jets enables the airline to get the "top brains to cope with a problem discovered in the middle of the night on a plane located on the opposite side of the country.

"If airline schedules are cancelled, both the airline and the plane get a bad reputation," (Continued on Page 2)







NEW LOOK—Left and right shots of newly-remodeled Convair San Diego engineering library in Bldg. 5 show contrast with center view of former circulation area. At right, Keith Blair, chief librarian, and Frank Armstrong consult with Annabel Whitby and Heloise Grant at new circulation counter. In background is Lydia Curry.

Veteran Convair Men Assigned Roles in Astro Base Activation

(Continued from Page 1)

served as superintendent of final assembly and was superintendent of development manufacturing prior to his transfer.

Pope was tool project engineer at Plant 2. His Convair service dates back to 1942 when he joined Convair Fort Worth. He moved up through the ranks there and transferred to San Diego in 1953. He has served mainly in tooling and special projects sections.

Chavez joined Convair in 1942 at San Diego. Since that time he has worked extensively in engineering, primarily in testing operations. He has been with Astro from shortly after its inception, serving at Sycamore Canyon as test director, then in field test support and was chief of activation service in product support department prior to his new assignment.

Lacy has worked with Convair for 18 years, joining the company first at Fort Worth. Through the years he has held various supervisory positions at Fort Worth and later at San Diego where he transferred in the early days of the F-102 program. His latest title was general supervisor of planning control at Plant 2.

Huntsman joined Convair SD in 1941 in final assembly. He moved into supervision in 1950 and up to general foreman of field operations during the height of the F-102 and F-106 programs at Plant 2. He transferred to Astro in 1958 as chief of operations support at Sycamore Canyon, a post he held until his recent move to base activation.

Judging for Card Designs Dec. 15

Astronautics and San Diego artists still have a few days to put their talent to the test.

Best designs in a Christmas card contest will win merchandise awards at a meeting Dec. 15 at 7:30 p.m. in the Convair Studio, Spanish Village, Balboa Park.

Designs should be original and no larger than 32 square inches. Watercolor, charcoal, oils, pen and ink and other art forms can be used. Judging will take place at the meeting and awards will go to the top three entries.

'My San Diego 1960' On Sale at SD, Astro

Convair and its people get close attention in a new book, "My San Diego 1960," by Neil Morgan, San Diego Evening Tribune columnist.

The book is on sale at a reduced price ($1.50) at employee services at both Astronautics and San Diego operating divisions as well as the SD Employees' Store across Pacific from Plant 1. A chapter describes the background and future of the San Diego aircraft industry. Of the 85 photographs (28 in full color) many are of Convair scenes.

Pod and Pylon Dept. Formed

(Continued from Page 1)

will power the Convair 600.

This RB-66, two-engine reconnaissance bomber built by Douglas Aircraft Co., Inc., for the Air Force, is leased to General Electric Co. for engine testing. It is the same plane used to check out the CJ-805-3 engines for the Convair 880.

Horkey-Moore Associates of Torrance, Calif., has been subcontracted by GE to build the pylons and fixed pod portions for the first test pods. Convair SD has the task of building the major portion of the pods.

Assembly of production 600 pods and pylons in the Convair SD plant will begin immediately after completion of the RB-66 test articles.

SD, ASTRO TO GET $1 HOLIDAY DINNER

Christmas holiday dinner at all Convair Astronautics and San Diego cafeterias is set for two weeks from today, Wednesday (Dec. 23).

For just $1, tax included, Convair diners will have their choice of a complete turkey or ham dinner, said W. E. Rickman, The Prophet Co. supervisor of Convair cafeterias.

Besides the entree, dinner will include dressing, gravy, cranberry sauce, tossed green salad, corn, snowflake potatoes, roll and butter, dessert, and drink. Apple, mince, or pumpkin pie may be selected and choice of hot or cold drink is offered.

Rickman said that serving operations will be streamlined to take care of the expected crowds. The special menu will be offered during all lunch periods at SD Plant 1 and Plant 2 cafeterias and at the Astronautics cafeteria.

Con-Trib Campaign Hits 90 Per Cent

Participation in the Con-Trib-Club at Convair SD has reached 90 per cent of plant population as a result of the recent membership round-up campaign, J. K. Field, Con-Trib committee chairman, announced last week.

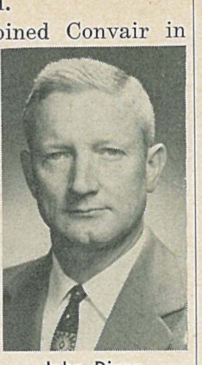
"We hit the desired goal dead center," Field said. At start of the campaign participation stood at 80 per cent. Included in the new total are Convair SD's off-site bases, Palmdale, Edwards, and Holloman. Con-Trib-Club membership now totals 20,803 compared to total plant population of about 23,100.

New Con-Trib membership cards will be distributed in all departments during the last two weeks in December, Field added.

Dixon Former GO Planner

John W. Dixon, Convair SD's new manager of long range planning, for the past three years has [illegible] General Office as assistant to the vice president-planning, E. P. Wohl.

Dixon first joined Convair in 1953 at Fort Worth, transferring to the coast in 1956.



John Dixon

(In **Convairiety's** announcement of his appointment, Nov. 25, he was confused with another John W. Dixon, long time Convair man in inspection and quality control departments.)

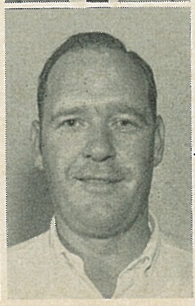
The new department head is a native of Kentucky. He graduated from George Washington University with a degree in foreign affairs and holds a master's degree in economics from the University of Miami. Dixon will be responsible for program status reporting for the SD operating division, new business evaluation, master scheduling and new proposal coordination.

Cost Reduction Honor Roll

Installed during the last two weeks:



James E. McCann's (Dept. 98-6) CIP will save $17,765 a year.



O. D. McHargue's (Dept. 14) ES will save $1,869 a year.

Engineering Library Improved By Substantial Remodeling

Renovation of the engineering library at Convair San Diego, completed the end of November, has furnished the plant with a modern, up-to-date facility.

The reading room and circulation department have been completely refurnished in light maple shelving, tables, chairs, counters, and desks by John E. Sjostrom Co. of Philadelphia, Pa., library furnishers.

"All planning in modernization of the library was pointed toward one purpose—to provide an atmosphere conducive to study and research for Convair SD people," said Keith Blair, chief librarian.

Three walls of the reading room are lined with 27 sections of shelves designed especially for periodicals and 10 sections for reference books. There is space for 600 current periodicals and 1500 reference books. Low shelving in different parts of the room provide space for 1800 volumes of indices and abstracting service of scientific and technical abstracting journals.

Special features installed are the new book display, special atlas case, dictionary stand, and six individual study "carrels," especially-built chair and desk combinations with partitions for privacy.

Although the library on the second floor of Bldg. 5 at Plant 1 was designed primarily to service SD engineering department, its services and facilities are open to all Convair San Diego and General Office, emphasized Blair.

On its shelves, available to Convair SD people, are 20,000 books and bound periodicals and 100,000 research reports. At present, 400 subscriptions to technical and industrial publications are maintained. In addition, the library receives about 1,100 research reports and 200 books a month. A bulletin listing newly-received material is distributed weekly.

The library circulates as many as 10,000 items a month.

Under a new policy, periodicals will not be circulated but will be kept on hand at all times for readers in the library.

Also, a top secret reading room has been provided in the vault of the area where Convair SD people can study highly classified material.

Besides circulation and reference functions of the library, other services include literature searching, translation service, inter-library loan service, photo-duplication. Convair San Diego's library has direct contact with the largest and most complete libraries in the United States—the New York Public Library and Institute of Aeronautical Sciences, New York City; Linda Hall Library, Kansas City, Mo.; Library of Congress at Washington, D. C. Urgent material can be obtained by airmail or teletype.

Convair SD library also acts as liaison for the Armed Forces Technical Information Agency (ASTIA), for obtaining government research reports.

Los Angeles Home Base For 880 Jets When They Join TWA

(Continued from Page 1)

Dunn said. To keep TWA's investment in a jetliner working, he added, it must be in the air for most of the daytime flying hours.

"This is no mean trick. In other words, we must have already coped with the problems that could arise. At Convair, you have the plane on the ground. TWA has it in the air."

Dunn also discussed some of the problems experienced with jets now flying with TWA. He emphasized the need for solving problems in a hurry.

"We will jointly achieve a safe, reliable, economical airplane and operation if we pay attention to details, are sensitive to the problems as they arise, produce prompt effective fixes and are generally responsive," he stated.

Assisting Dunn in the presentation was S. L. Higginbottom, assistant TWA vice president—engineering, flight test and inspection.

Convair Group Plans Air Trip to Europe

A group of Convair San Diego people and their families are planning ahead for a two-week European trip next summer.

The reduced-rate tour, arranged through Associated Airlines, is set for June 10-26 for 97 persons, capacity of the plane.

Two options are available—round trip to Paris only at $450 per person, or a bus tour of central European countries and attendance at the Oberammergau Passion Play for $215 a person in addition to round-trip fare.

Full information can be obtained from Jack Horton at SD Plant 1, ext. 1941.

SD BANK TO OFFER AUTO TAG SERVICE

Car owners at Convair SD will be able to purchase 1960 license tags at the Five Points branch of the Bank of America, 1691 Hancock St., starting Jan. 4.

Personnel of the Motor Vehicle Department will handle license sales at the bank until Feb. 4. Purchasers must submit tab cards carrying the amount due and pay by money order, cashier's check or cash.

For the convenience of Convair people, the applications and money from groups will be accepted in one lot, and processed for pickup the following day.

Photo Print Price Rises to 50 Cents

The price of photo prints ordered by Convair San Diego people has risen.

Prices now in effect are 50 cents each for less than three prints ordered from the same negative; 40¢ each for three to 49 prints off of the same negative; and 35¢ each for any number over 50. Prices do not include sales tax.

Prints of negatives filed in the Convair SD photo lab can be ordered through employee services, both at Plant 1 and Plant 2.

★ Convairiety ★

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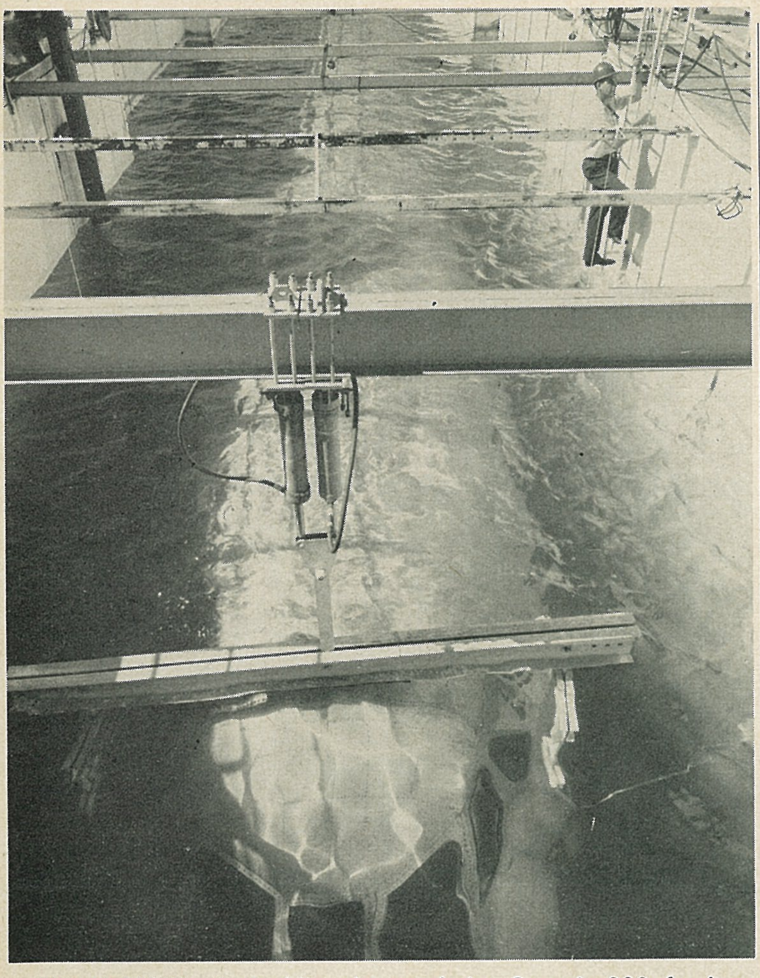
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Alyce Martin. News contacts: AFMTC, Bobbie Waddell, ext. 3038; Vandenberg AFB, Bunny Ingraham, ext. 8-3258; Warren AFB, Bill Jack, ext. 72254.

FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Susan Bagby, Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Office, Room 103, Bldg. 301 B, Palmdale, ext. 337. Staff: Richard L. Millett.



MOBY DICK?—Resembling huge whale, Convair 880 fuselage lies submerged in hydrostatic test tank at SD seaplane ramp as it passes half-way mark in second part of testing program. Fail-safe and crack growth checks will end this month. On ladder is Russ Sherman, SD structures test lab engineer.

Minnesota Site Chosen For 600 Anti-Ice Test

A number of Convair SD men are shivering in Minnesota weather with the Convair 600 pod test specimen slated for anti-icing testing.

Built in SD experimental, the test stand assembly, complete with bellmouth, shroud, and ejector, will be set up this week at Hopkins, Minn., for extensive tests during the next two months.

The test stand was completed on schedule last month by Willard Martin's group in Dept. 31. Shipped by rail, with delicate instrumentation parts going air freight, components were due to arrive at the Hopkins test site early this week.

The Minnesota location was chosen because temperatures during December and January normally drop to 20 degrees F. below zero, said K. V. Lawson of the SD engineering project office. The outside air temperature will be important in simulation of actual cold weather flight conditions.

A General Electric CJ-805-21 prototype engine will be installed in the test stand to serve a dual purpose during tests. While sucking air through the ejector to simulate flight velocities around the engine inlet, it will also act as a deicer. Air from the engine is diverted to keep ice from forming on the leading edges of the air intake ducts. Tests will check out exact amount of air diversion necessary for deicing without affecting engine power. The 30-foot-long tail pipe (or ejector) can be used in varying lengths to attain proper airflow conditions simulating various airborne speeds.

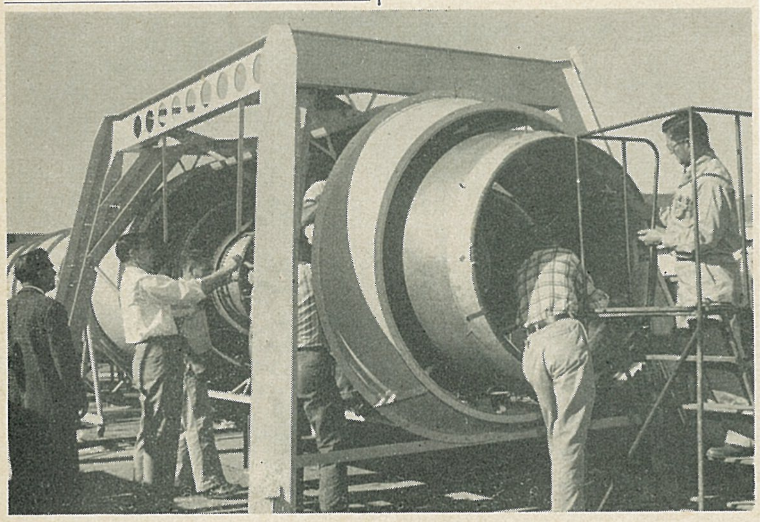
Cold weather tests are the technical responsibility of the SD thermodynamics group under Vic Hudson. Hudson will be at Hopkins as Federal Aviation Agency designee. F. J. Hekking of the thermo group will act as test coordinator, assisted by Richard O'Neill, also of thermodynamics, and William Michael, from thermodynamics lab. V. L. Booth of SD propulsion design group, who was in charge of test stand design, will be at Hopkins during initial installation, as will two Dept. 31 technicians, L. E. Roberts and George Lutz.

Research, Inc. constructed the foundation and test facility under an assist subcontract for Convair.

General Electric representatives, Ross Anderson and Carl Carlson, will accompany the GE engine to the test site. This particular engine is slated for return to Convair SD early next spring for tests at the SD seaplane ramp.

LIAISON GROUP PLANS REUNION

A reunion for the F-102 liaison engineering group at Convair SD's Plant 2 (active 1952-1954) is planned for this Friday (Dec. 11) at Little Bavaria on Sorrento Road at 7 p.m. For information, contact Ed O'Connell, ext. 241, SD Plant 2.



READY FOR TESTING—Vernon Booth of Convair SD engineering and Willard Martin, Dept. 31 assistant foreman, watch final assembly of Convair 600 anti-icing test stand in Convair SD experimental yard before shipment to Minnesota. Assemblers, all of Dept. 31, are B. A. Shourds, R. S. Mendoza, Frank White, Gene Pollpeter, L. A. Salgado.

Mobile Air Conditioner Cools Atlas Components For Checkouts, Firings

Convair Astronautics has developed a unique portable air conditioning unit for use during certain Atlas missile operations. Although compact, it is capable of cooling 25 average San Diego homes.

Measuring only 8 by 12 feet and weighing some eight tons, the unit helps maintain constant low temperatures in compartments housing intricate Atlas missile components and systems. It functions during checkouts, static firings and until seconds before actual launchings.

End product of a development program almost as old as the Atlas itself, the unit was designed by Astro's Bill Stacey of plant engineering. Four such units have been ordered. Two are on hand now at Astro's Air Force Missile Test Center base.

Without adequate cooling temperatures within component compartments range well over 100 degrees, often causing failures or malfunctions. Astro began investigating portable cooling systems early in the design of the Atlas. Commercial units available lack sufficient capacity for the job. Too, most refrigeration units utilize water in operation. Moisture is a potentially dangerous element around missile components.

"We launched our development program on a crash basis," said W. J. Stanley, Astro's chief plant engineer. "Bill Stacey was assigned to the job and has been with it since."

The present unit features a unique cycling operation. Air is first cooled, then expanded through heating to remove moisture and recooled.

Designed to operate on a self-sustaining basis, the unit includes its own protection from the elements. Louvered doors, plus removable panels, protect the unit, but can be removed for maintenance purposes. Only electrical power and ducting to carry off the air is needed for operation.

When used at launch sites, the unit is set up some 150 to 200 yards from the Atlas. Pipes funnel the chilled air to a connection on the missile. Internally, the air is carried through a series of perforated ducts.

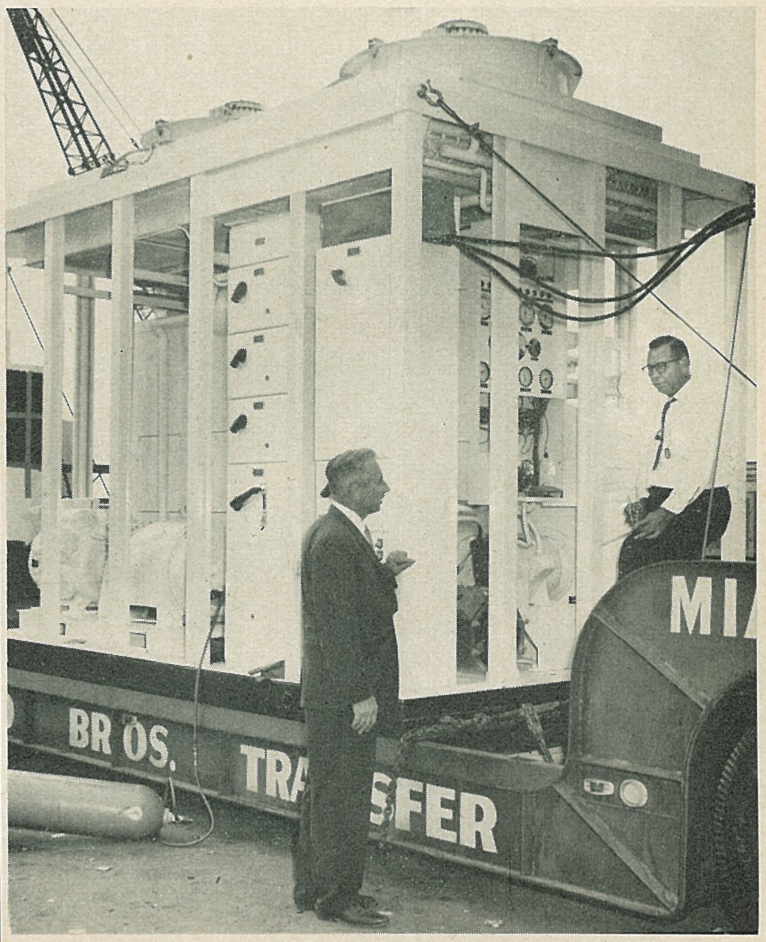
In operation the unit produces some 2,280 cubic feet of standard air per minute. This leaves the coils at a temperature of 20 degrees and enters the piping at a speed of 600 miles per hour.

Maximum allowable temperature within compartments is 40 degrees with an average of 35 degrees being maintained at all times.

Controls on the test conductor's console within the blockhouse activate the unit during countdowns. The connection between the supplying pipes and the missile is broken just seconds before launch takes place.

Some idea of the urgency of the operation is reflected in the time the unit is put into operation after leaving the manufacturer's shop in San Diego. This is only 10 days! Three days are used in checking out the system at Astro on a 24-hour basis. Three days are allotted for transportation via truck to Florida, then the remaining four days devoted to set up and checkout.

Units similar to this are in use at all test bases and Vandenberg AFB. Other units are destined for Air Force operational bases following proofing at Astronautics.



COOL, MAN, COOL—Astronautics-developed portable air conditioning unit cools missile components during checkout, static and actual firings. It is self-sustaining. Bill Stacey, right, plant engineer, checks controls while Fred Antelline, manufacturer, looks on. Two such units are now on hand at Astro's AFMTC operation.

F-102s on Duty At Japan Base

F-102As, built at Convair San Diego, have been assigned to Itazuke Air Base on Kyushu, Japan, according to an Air Force announcement.

The Convair fighter-interceptors are assigned to the 68th Fighter-Interceptor Squadron in the 41st Air Division. Commander of the 68th FIS is Lt. Col. Harford P. Jenks.

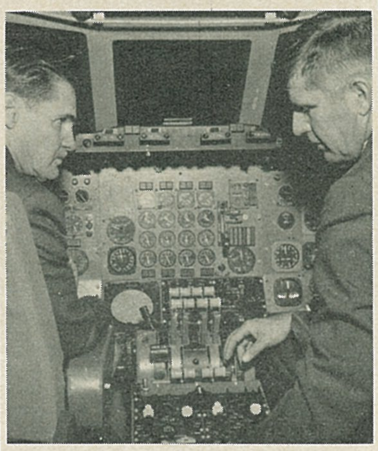
H. C. Hattel heads a group of Convair SD field service representatives at the Japanese base. Others are T. G. Saint Sing, Jack Livesay, D. E. Horeish, J. J. Gundaker, and T. C. Larson. Both Hattel and Gundaker went to Itazuke from Naha Air Base in Okinawa where F-102As went into action with the 16th FIS in March of this year.

Heading Convair efforts in support of F-102s in the Pacific area is Rudy Haas, field service area supervisor of the Far East.

Delta Airlines Crews' Ground School to End

Final ground school for Delta Airlines flight crews, being conducted by Convair San Diego production flight, is due to end Dec. 18.

During the latter part of November, the second and third Delta groups, totaling about 40 men, were in classes in Bldg. 4 training quarters at SD Plant 1. Second class concluded the day before Thanksgiving, leaving 18 Delta men remaining in the last class.



COCKPIT CHECK-OUT—T. P. Ball, Delta Airlines superintendent of flight operations (left), receives briefing in Convair 880 cockpit procedures trainer from W. B. Harwell, SD chief of production flight.

Delta Airlines is scheduled to take delivery on its first Convair 880 in January. A Convair SD flight captain and flight engineer-instructor will accompany the plane to assist in 880 training at the Atlanta, Ga., headquarters.

Next 880 training classes to be given by SD production flight will be for Federal Aviation Agency representatives. Two courses have been scheduled, one to start Jan. 4 and the other, Feb. 8, said P. H. Selby, production flight training supervisor.

FAA flight inspectors, whose task is to certify pilots, and FAA maintenance inspectors, who certify flight engineers, will be given a four-week ground school, climaxed by a fifth week of cockpit procedures trainer indoctrination and five hours each of actual flying.

Three FAA representatives were in San Diego from Atlanta, Kansas City, Mo., and Washington, D. C., to take 880 ground school training with the second group of Delta Airlines personnel.



FINAL CLASS—Third, and last, group of Delta Airlines flight crews are now in final weeks of ground school training at Convair SD. T. P. Ball, Delta superintendent of flight operations, is at extreme right. Convair men are Jack Rogers (far left), SD flight engineer-instructor; Larry Brandvig, 880 pilot (third from left); and L. W. Hughes, SD training coordinator (third from right).



PHILADELPHIA INQUIRER, THURSDAY MORNING, SEPTEMBER 4, 1947

McCahan Hurls No-Hitter as A's Defeat Nats, 3-0

Error Spoils Bid for Perfect Game; Rookie Faces 28 Men, Walks None

Brilliant Feat Snaps Mackmen's 7-Game Losing Streak: 3 Senator Pinch Hitters Fail in 9th; Valo's Double Scores 2

By ART MORROW

PERFECT CONTROL

'NO-HITTER' BILL McCAHAN

HEADLINES—McCahan makes 1947 news with no-hit game.

Ex-Big League Hurler Now Engineer at FW

In 1947, only two no-hit games were pitched in the American League.

And Bill McCahan, Convair Fort Worth industrial engineer, figured in both of them—winning one himself and serving as losing pitcher in the other.

The win was a highlight of McCahan's four-year stint as a major league pitcher. He turned in his near-perfect game while hurling the Philadelphia Athletics to a 3-0 win over Washington.

"Only one man reached first," McCahan recalls, "and that was on an error by Ferris Fain (Athletic first baseman), who threw behind me while I was covering first on a ground ball."

Another highlight of McCahan's big league career was his lifetime record against the then dauntless Yankees.

"After losing the first time out to the Yankees, I was lucky enough to beat them five times without losing a single game."

A native of Philadelphia, McCahan was discovered by the "grand old man of baseball" himself—Connie Mack.

"Mr. Mack paid my tuition through Duke University," McCahan said, "on a verbal agreement that I'd play for the Athletics when I graduated."

The burly Philadelphian admitted that such verbal agreements "look mighty pale beside some of the inducements offered today's bonus players."

While earning three varsity baseball letter awards at Duke, McCahan was garnering a like number of basketball letters.

After graduating from Duke in 1942, McCahan spent three years in B-29s and contributing his baseball talents wherever the Air Corps could use them.

Discharged in 1945, he played a season of pro basketball, then pitched such steady baseball for Toronto of the International League that the Athletics called him up.

His first major league start was a smasheroo. Before 65,000 fans packed into Cleveland's Municipal Stadium to observe Lou Boudreau Day, McCahan bested "Bullet" Bob Feller 2-0 in a rousing duel.

McCahan's rising career was thwarted in 1948 by a sore arm. He wound up in the Brooklyn farm system and landed in Fort Worth in 1951.

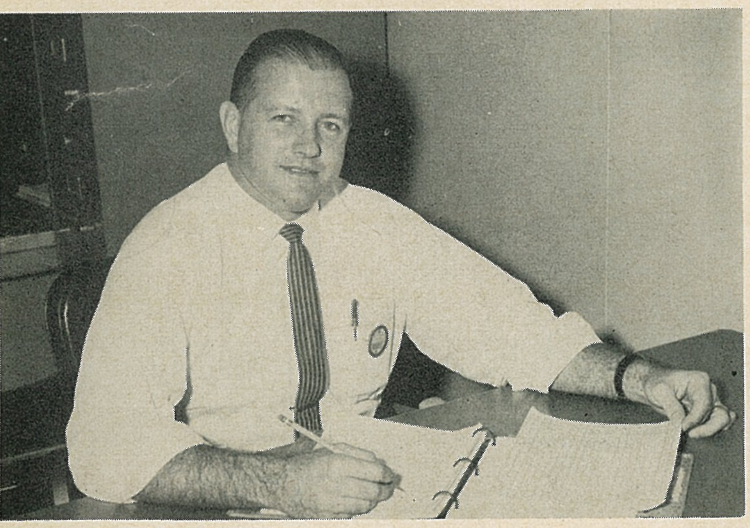
Commenting on the ups and downs of big league baseball, McCahan recalls:

"In 1947 the Yankees offered the Athletics $500,000 for myself, Fain, and Sam Chapman in a package deal," McCahan said. "They also offered the Athletics $250,000 for my services alone. But Philadelphia declined.

"Two years later, the Athletics sold me for $10,000."

The best hitter he ever faced?

"Strangely enough, I guess it would be Gerald Priddy (Washington second baseman), who probably never hit over .240 in his life." This included such company as Ted Williams, Joe DiMaggio, Charley Keller, Tommy Heinrich, Yogi Berra, and Hank Greenberg.



MEMORIES—Bill McCahan, industrial engineer at FW, looks over schedule charts. Former big league pitcher, McCahan recalls highlight of career.

Orchid Plant Takes Off on Own; Bears Abundance of 80 Blooms

It all started with one potted plant bearing one orchid bloom.

Now it's grown to two greenhouses and a multitude of orchid plants—one freakishly bearing 80 blooms.

That's the thumbnail history of the "greenthumb project" of W. M. Counts, Dept. 19-1 at Convair Fort Worth.

His 80-orchid plant is the result of putting the plant in a pot about three times normal size and allowing it freedom to expand at will.

Never in his orchid-growing experience has Counts heard of a more prolific plant. And his orchid growing experience began in 1956 when Mrs. Counts decided she wanted a greenhouse.

"She got the greenhouse, potted one plant, then turned it over to me," Counts smiles. "And she hasn't touched a plant since."

In his greenhouses Counts grows orchids almost exclusively and exhibits them occasionally in flower shows.

He recently won his first blue ribbon in an all-orchid show—the Houston Orchid Society's "Display of Orchids" held at Houston's Rice Hotel.

His winning specimen was entered in the lavender Cattleya class. But in addition to Cattleya orchids, Counts cultivates many other varieties, including the Vanda—famous for its prominent part at filling station grand openings.

Variations in species to be grown are almost unlimited for Counts. There are 17,000 species of orchids—more than any other plant except grass.

Grown from seeds or runners, it can take up to a decade to produce a bloom. And a big problem as far as exhibition goes is the fact that orchids bloom only once a year.

A consolation is that the bloom usually lives a month—whether cut or on the plant.

Orchids bring more advantages to their cultivator than the opportunity to win blue ribbons. Counts has become one of the most popular husbands in town. Every time his wife has guests, he favors the ladies with an orchid!

Family Bible Used As Birth Certificate

When J. F. Dearman of FW Dept. 57 retired recently (after 13 Convair years) he brought along his "Pictorial Family Bible" as proof of his age.

"I have never had a birth certificate. Arkansas didn't issue them when I was born in 1894."

The family Bible works about as well, however. It was handed down to Dearman from his father and is around 80 years old.



PROLIFIC—Eighty orchids on one plant was phenomenon occurring in greenhouse of W. M. Counts, above, Dept. 19-1 at Convair Fort Worth.

Free World to See Industrial Photos

A still photo display prepared by Convair SD members of the Society of Photographic Scientists and Engineers has been chosen by the U. S. Information Agency for exhibiting in major capitals of the free world.

The display shows Convair cameramen at work, taking photos that assist engineers in solving industrial problems. It was shown at the Los Angeles County Fair in Pomona, Calif., where it was noticed by a representative of the Information Agency. Preparation of the series was directed by Martin Miller, SD still photo assistant supervisor.

SD Second-Shifters Give Blood Dec. 10

Tomorrow (Dec. 10) will see the regular monthly visit of the bloodmobile at Convair San Diego.

Second-shifters at Plant 1 will be donors to tide Convair SD's credit at the San Diego Blood Bank through the holiday season. The bloodmobile will be in Bldg. 4 between 5 and 9 p.m.

Distribution Day Changed to Tuesday

To permit maximum distribution, in view of the impending holidays, the issue of Convairiety that normally would be in the boxes Dec. 23 will be distributed a day ahead of time, Dec. 22, a Tuesday.



DREAMBOAT—Maiden voyage of Kolumaran, designed and built by two Convair SD men, was made last month. Boat cost builders $5,000; value now is roughly $30,000. Note transparent plastic sails made of Mylar.

Snapped Mast Mars Shakedown Of Unique Kolumaran at SD

Dreams have been known to "walk" and "talk," but few have sailed.

That is until last month when the "Kolu Naia" was launched by two Convair SD men. Only a handful of people witnessed the event, but thousands had been intrigued by her story, well publicized in **Convairiety** (March 4, 1959) and magazines of the boating world.

San Diego Bay skippers took a long look, then looked some more. It was the first sailing test of the 40-ft. Kolumaran that has for more than two years been the pet project of Dean Kennedy and Jack Fulton, both of Convair SD's Dept. 15-6.

The Kolu Naia is three-hulled (because of double outriggers), weighs a mere 3,000 lbs., and draws but 10 inches of water. The boat fulfills the three criteria of every boating enthusiast—speed, comfort and beauty.

Light weight and shallow draft of the boat enable it to skim over the water at the speed of the prevailing wind. The cabin, mounted on the main hull, has berthing and other accommodations for five.

Flowing lines of the boat more than fill the beauty requirement. Hulls are built up of shaped plywood, covered with stressed fiber glass.

So far the Kolumaran is meeting performance expectations of the designers, Fulton reports. On its first outing the boat "appeared to plane at 10 knots."

Problems, however, have been encountered because of the extremely tall sail arrangement. (The sails, incidentally, are made of Mylar, a transparent plastic.) Substantial adjustments are being made since the mast was cracked in half by a sudden gust of wind, Fulton added.

The mast mishap has forced the designers to cancel plans to enter the San Diego to Acapulco boat race in January.

Fulton and Kennedy assess the boat's value at $30,000. More than two years of spare-time work has gone into it. Materials cost roughly $5,000.

Fulton is now turning his efforts to completing plans for a smaller 24-ft. "open design" Kolumaran. He has hopes of establishing a fleet of these interesting craft in San Diego.

He thinks the "open design" designation will permit considerable variation in the hull, position of outriggers and particularly in sail arrangement, which would encourage experimentation to discover better rigs for a fast craft of this type.

Genie Missile Fired by Air Force F-106 On Successful Mission Over Gulf Range

A Convair F-106 made a successful test flight over Tyndall Weapons firing range at Tyndall AFB, Fla., early this month in the first operational firing of its missile.

For the first time, the Douglas-built "Genie" was tested in actual flight conditions. The practice version of the MA-1 atomic warhead, MB-1 missile, was used for the firing over the Gulf of Mexico range.

The F-106 used in the test was assigned to the 4750th Test Squadron at Tyndall from the 539th Fighter-Interceptor Squadron of McGuire AFB, N. J. At the controls of the plane during firing was Capt. Tom Goff of the 539th FIS. His crew chief was T/Sgt. John Smith of the Tyndall Test Squadron.

Capt. Norm Smedes, project officer for the firing, called the first firing "successful."

The F-106 used in the task is now based at MacDill AFB at Tampa and will be joined by other Convair-built jet interceptors for future practice firings.

Convair SD field service representative at Tyndall is Edward Miro.

Gilliland to Speak On Missile Testing

R. H. Gilliland, chief of quality control reliability at Convair SD, will speak at a dinner meeting Dec. 14 at the Lafayette Hotel of the San Diego Chapter, American Society for Quality Control.

He will discuss "Missile Reliability Testing—Engineering or Quality Control?"



"Sometimes I wish the Boss wouldn't take the employee suggestions so literally."

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

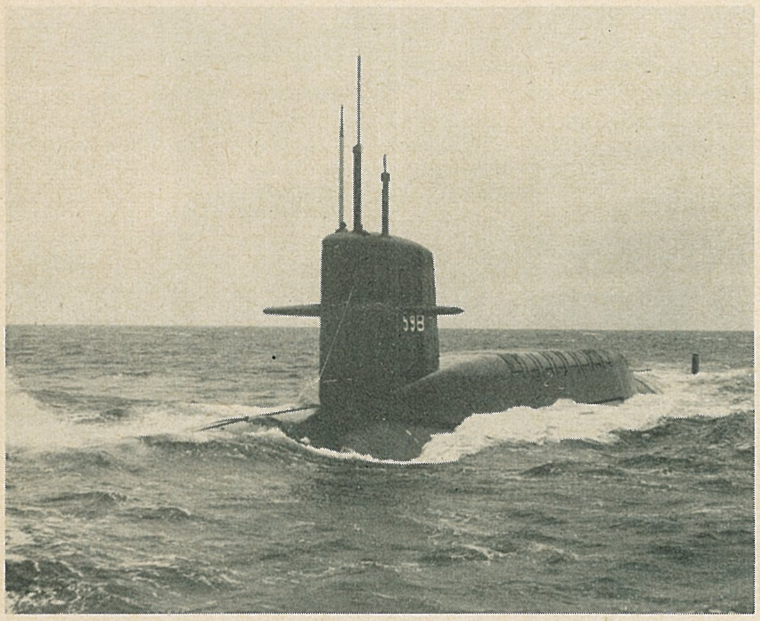
Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.



INAUGURAL—Nuclear powered submarine George Washington made two-day cruise through waters of Long Island Sound last month on first builder's trials. On board for trials was Vice Adm. H. G. Rickover, USN. Submarine, launched June 9, will be equipped to fire Polaris ballistic missiles from submerged positions. It was built by General Dynamics' Electric Boat Division.

Study Aims at Cutting Rates For Air Freight

MONTREAL—A joint sales research program to develop a break-through tariff which will bring air freight rates down to levels competitive with many truck and rail freight rates has been announced by The Flying Tiger Line and Canadair Limited.

The two companies have agreed on a program and supporting budget which will involve an expenditure of approximately $200,000 in the next year.

Research staffs will include consultants nationally known in air freight traffic development.

A joint statement said:

"Our two companies have joined in this venture for mutually beneficial reasons. Canadair, as builder of the CL-44D, which will be the first turboprop swing-tail air freighter, is vitally interested in the economics of low-cost air freight. Flying Tiger has on order a fleet of 10 CL-44D-4's, which it will place in service in 1961. The airline is seeking a tariff for this new airplane which will effect a break-through into freight rate areas on an average of 30 to 40 per cent under today's existing rates.

"We believe that rates as low as six cents a ton mile are possible with the CL-44D-4 and that we can achieve an average rate of some 13-14 cents, compared to the existing average of 18-19 cents.

"Studies previously made by Professors Brewer and Ulvestad clearly indicate that such rate should create an air freight market from seven to 10 times today's volume."

Air Force Contract With S-C Increased

ROCHESTER—The U. S. Air Force has awarded a $9,384,733 increase for a development contract to Stromberg-Carlson Division.

The additional contract, which will be administered by the Rome Air Development Center for the Air Research and Development Command, calls for changes in the design of a complex reconnaissance system. It will bring the total cost of the research to date to $26,907,062.

Stromberg-Carlson Radio Output Upped

ROCHESTER—Full-scale production of custom auto radios for 1960 cars has begun at Stromberg-Carlson.

Featuring 35 different custom models in both manual and push-button, the new line has been engineered and produced to meet high fidelity standards.

The use of transistors in the audio power supply has eliminated the vibrator, with its common hum and noise interference, and has created a greater dependability.

Reception of the new line was so enthusiastic that the initial production order of 850 per day was increased to 1,150.

General Dynamics Ad Program Will Emphasize Vision, Reality

NEW YORK—With a "Vision & Reality" theme, General Dynamics Corporation last month launched its 1960 advertising program.

The initial ad featured TRIGA, General Atomic's inherently safe research, training and isotope producing reactor. Each subsequent advertisement in the series will present a particular product of General Dynamics and link the product to the philosophy and foresight that led to its development. An unusual aspect of the ads is that the text will be printed in English and a foreign language. This approach is designed to identify General Dynamics to millions of readers throughout the world as the builder of famous products, at the same time advancing a corporate image of scientific creativity and vision.

Publications carrying the first advertisement included The Saturday Evening Post, Time, Time-Atlantic, Time-Pacific, Time-Latin America, New York Times Magazine, The New Yorker, and leading media in Europe and Asia.

Reactor Scheduled For Kansas Campus

MANHATTAN, KAN. — A versatile and inherently safe General Dynamics TRIGA reactor will be installed on the campus of Kansas State University here to train students in the rapidly expanding field of industrial uses of nuclear energy.

TRIGA, conceived and developed by General Atomic Division, also will be used for engineering, physical science, agricultural and biological research.

Sub Launching Set For Dec. 19

GROTON—The fifth nuclear submarine to be launched this year and the first sister-ship of the swift, deadly USS Skipjack, will slide down the ways here at Electric Boat Division Dec. 19.

The Scorpion, namesake of a valiant World War II submarine lost in action, is an identical twin of the Skipjack, world's fastest and most maneuverable submarine.

Like her record-setting sister, the Scorpion will be not only an attack submarine but also the most versatile anti-submarine weapon now known.

JOHN WILD TO JOIN ATOMIC DIVISION

SAN DIEGO—John M. Wild, developer of a three-dimensional boundary layer theory of aerodynamics, will join General Atomic Division as director of Project Orion.

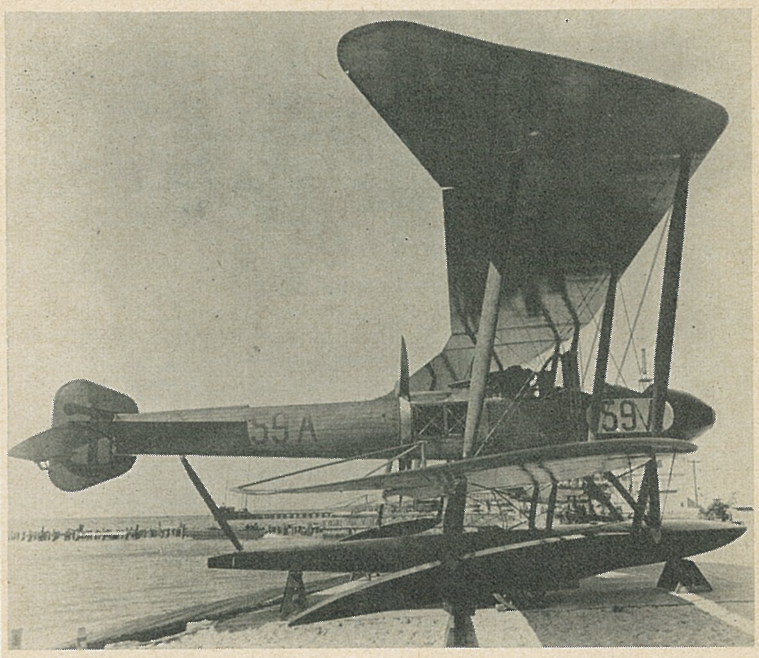
Wild will also become assistant director of the John Jay Hopkins Laboratory for Pure and Applied Science.

Project Orion is General Atomic's program for using controlled nuclear pulses for propulsion of vehicles in space.

Navy Communication Contract Awarded

ROCHESTER — Stromberg-Carlson Division has received a $1,200,000 contract for the design and development of an advanced, completely transistorized single sideband communication system for U. S. Navy Bureau of Ships.

It is expected that the use of single sideband techniques will greatly increase the reliable range of ship-to-ship and ship-to-shore communication, at the same time achieving a substantial reduction in weight, space and power requirements.



GALLAUDET D-1—Pusher seaplane, pictured at Pensacola in 1917, was driven by four-bladed propeller revolving around drum mounted in fuselage. Two-place cockpit is far forward. "Terrific speed" discouraged pilots from accepting D-1 flying boat.

Weighty Problem

Water Absorbing Boat Hulls Headache to Early Designers

(Before this installment-form history of Convair veers back to Consolidated Aircraft, after touching on Gallaudet, Thomas Bros. and Thomas-Morse, tributaries to Convair's historical main stream, readers will find some interesting material this week concerning early day seaplanes.)

* * *

After Jan. 26, 1911, when Glenn Curtiss made his first take-offs and landings on San Diego Bay, aviation took to the water.

Curtiss used a pontoon-fitted pusher biplane, and flew from old Spanish Bight, a shallow inlet since filled and made a part of North Island Naval Air Station.

At Bath, N. Y., Thomas Brothers followed suit on Lake Salubria. First flight dates are obscure, but in later years the company reported having built "several" flying boats during 1912 and 1913. Pontoons also were fitted to a Model TA biplane, a 1911 land machine.

The Thomas Brothers Model B was two-place. An Astro-Daimler engine, 90 hp, drove it 65 mph. The Thomases had trouble with early wood hulls absorbing water and adding weight. Several 1914 hulls were of reinforced wood frame covered with 30-gauge galvanized iron sheet.

Gallaudet's flying boat B was designed by E. F. Gallaudet. Its lines loosely resembled his 1912 A-1 Bullet monoplane (**Convairiety**, Feb. 4, 1959). The hull was mahogany, the pilot's position ahead of the leading edge. The B boat, a monoplane, was built at Norwich 1913-1914. It was powered by a Maximotor engine, 110 hp, with two three-blade pusher props driven through a system of shafts and bevel gears.

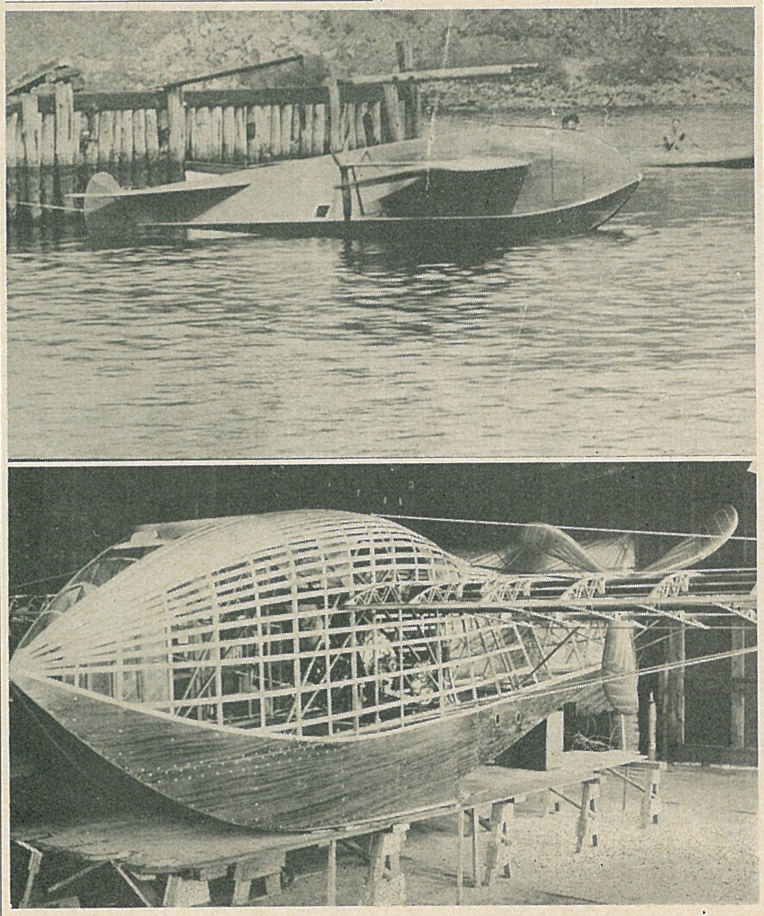
Most remarkable of the early seaplane designs was the Gallaudet D-1. Its four-bladed propellor spun on a mounting drum inside the fuselage. Built in 1915-1916, one was delivered to the Navy. Wing span was 48 feet, length 33 feet, with 4,000 lbs. "net" weight. Wings were wood and fabric with swept-back edges, chord increasing toward the tip. Power was from two Dusenberg engines, 150 hp each. As described by Gallaudet: "The fuselage is divided . . . and the two parts thus formed are joined by a large steel drum. . . . The propellor has a much enlarged hub which surrounds this drum and is carried on it by large ball bearings. The propellor hub carries a large internal gear which is driven at two-thirds engine speed by means of a pinion bolted to the inside of the steel drum. This pinion is in turn driven through a flexible coupling by the engine."

The inventor argued that this arrangement exposed only the efficient proportion of the propellors to the air stream, diminishing drag. A contemporary criticism was that the aft fuselage and tail section, hanging on the drum's internal mounting flange, sometimes wobbled.

The D-1 porpoised and partly sank by the nose during company testing. Crews worked day and night to repair it for Navy inspection. It was shipped to Pensacola and flown by Lt. Phil Rader, accepted in 1916 and assigned BuNo A-59. A Gallaudet brochure of 1920 reported "such terrific speed (for that period) that pilots could not be induced to accept the machine as a regular charge."



THOMAS B—Two-place pusher of 1914 had broad, flat hull, sheathed with galvanized iron to keep wood from absorbing water, and increasing weight.



GALLAUDET B—Construction photo, probably 1914, shows mahogany sheathing added to lower hull. Note single tubular steel spar in wing, aluminum tube trussing of ribs.—Smithsonian Institution photos.



NUMBER THREE—Third man to receive 35-year emblem from Convair is Walter E. Koch, Dept. 233-0 SD, who was honored during November. SD Manager B. F. Coggan made presentation.

Magic Show Set For Club Party

Members of the Convair SD Tropical Fish Club will hold their annual Christmas party Dec. 15 at 7 p.m. in the CRA Clubhouse, 3401 Pacific Hwy., Pete Beyrer, commissioner, reports.

Entertainment will include an hour-long magic show, featuring "Wandini," who in real life is Dick Rowe (Dept. 292). In addition, there will be movies, punch and cookies, and a bag of Christmas candy for each child.

Coin Club Plans Officer Election

CRA Coin Club members at Convair SD will elect officers and discuss a bylaw revision at the Dec. 15 meeting at 8 p.m. in the Hearing Aid Society Bldg., 3843 Herbert St.

Joe Miller, club spokesman, said a vote will be taken on a measure that would enable the club to charge a membership fee of $1 per year.



THIRTY YEARS—E. L. Raymond, Dept. 400-1 SD, received his 30-year emblem with proper ceremony last month. Present were, from left, A. W. Morgan, B. F. Coggan (SD manager who made presentation), R. W. Peters, Raymond, A. E. Hill, V. L. Summitt.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Dec. 1 through Dec. 15:

Thirty-five-year: Dept. 91-0, Jane F. Dunn.

Thirty-year: Dept. 1-34, H. G. Golem.

Twenty-five-year: Dept. 200, F. H. McLaughlin.

Twenty-year: Dept. 1-31, G. C. Spencer; Dept. 25, W. H. Apple, F. P. Sanchez; Dept. 188, J. W. Dixon; Dept. 400, J. S. Williams; Dept. 406, E. J. Thomas; Dept. 603, C. G. Fletcher; C. L. Pogorel.

Fifteen-year: Dept. 6, C. M. Behnke, R. B. Shead, Yale Weisman; Dept. 31, J. L. Novasel; Dept. 44, Inez L. Markel; Dept. 98, Merle Fullerton; Dept. 101, E. G. Baits; Dept. 188, J. W. Smith; Dept. 218, R. C. Rosenboom.

Ten-year: Dept. 3-5, Agnes S. Grant; Dept. 6, W. M. Chatfield, C. L. Johnson, D. M. Prelip, Louis Welk; Dept. 14, Fannie L. Agner, Katie T. Burgess; Dept. 15, A. D. Bush; Dept. 31, M. V. McArthur, George Sam; Dept. 115, P. E. Ewan, Mildred W. Hurst; Dept. 133, Robert Quinones; Dept. 146, Helen D. Mosher.

Dept. 171, H. E. Inman; Dept. 180, H. K. Sanders; Dept. 218, Camille E. Alcaraz, Belia C. Morales, Naomi T. Picou, Helen G. Tiner; Dept. 233, Evelyn McJoyner; Dept. 266, Henry Seltchook; Dept. 267, C. F. Brown; Dept. 288, Roberta C. Rand; Dept. 400, Gertrude J. Silva; Dept. 406, L. H. M. Bickel, I. R. Lanning.

Promotions

SAN DIEGO

Promotions to or within supervision effective Nov. 23:

Dept. 5, Master Planning: To manager of long range planning, J. W. Dixon.

Dept. 6-35, Engineering: To asst. computer group engineer, L. Lapidus.

Dept. 171, Field Operations: To asst. foreman, W. A. Brinkley.

Dept. 230, Model 8 Forward Fuselage Section: To asst. foreman, J. R. Holmes.

Dept. 231, Model 8 Intermediate Fuselage Section: To asst. foreman, J. A. Barton, M. H. Button, J. O. Lovell.

Retirements

SAN DIEGO

FUSERINO—Cosino, Dept. 25-2. Seniority date Dec. 7, 1950, retirement effective Nov. 17, 1959.

NESS—William, Dept. 406. Seniority date Oct. 2, 1950, retirement effective Nov. 30, 1959.

Deaths

SAN DIEGO

CHATFIELD—Worth M., Dept. 6. Died Nov. 27. Survived by daughter, Mrs. Gina M. Pournelle; sister, Mrs. Nina Schmidt.

CRAIL—Harold H., Dept. 34-1. Died Nov. 21. Survived by wife, Mary; two daughters, Mary Lou and Florence; son, Frank; mother and brother.

JACKSON—Anna B., Dept. 292. Died Nov. 27. Survived by husband, Rollin B.; sons, Rollin B. Jr., and Earl T.; sister, two grandchildren.

TRACY—Philip P., Dept. 160. Died Nov. 20. Survived by wife, Lillian; son, Philip T.; daughter, Mrs. Dorothy Robinson; sister and two brothers.

Personals

I wish to thank my Convair friends and the Con-Trib-Club for the many kindnesses and financial assistance given me during my illness.

Al Sanchez, Dept. 25

* * *

Our heartfelt gratitude to the many personal friends and associates of Benjamin M. Bender, throughout Convair, for the warm friendship and expressions of sympathy and understanding as evidenced by the multitude of messages, cards and beautiful floral offerings.

Mrs. B. M. Bender and family.

* * *

My undying gratitude to all of the kind people who aided me so unselfishly when I was injured, as well as my fellow employees for their generosity, cards, flowers and visits, while I was in the hospital.

Pearl Garrison, Dept. 231

Births

SAN DIEGO

DAHL—Son, Dean Allan, 7 lbs., 13 oz., born Nov. 24 to Mr. and Mrs. N. L. Dahl, Dept. 292.

MILLBURN—Daughter, Kimberly Rae, 6 lbs., 12 oz., born Nov. 19 to Mr. and Mrs. Dan W. Millburn, Dept. 217.

Hoedowners Plan Two Xmas Parties

Convair SD Hoedowners will get in the Christmas spirit at two special holiday square dance parties, Maury Scholz, CRA co commissioner, reports.

A party for students in the beginner and intermediate class will be held at 8 p.m. on Dec. 21 at the American Legion Hall, 4061 Fairmount Ave. Members of the advanced group will meet Dec. 22 at 8 p.m. at the University Heights Community Center, 4044 Idaho St.

Gift exchanges will be featured at both parties. Value of gifts is not to exceed 50¢. Scholz reminded members that the parties will end club activities until the new year. Classes and dances will go on the regular Monday and Tuesday evening schedule on Jan. 4 and 5.

TICKETS REDUCED FOR RUGBY MATCH

Convair SD employees will get a 50 per cent discount on box-office tickets Dec. 12 for a rugby football tourney in Balboa Stadium. Adults must show Convair ID cards to get the discount; children's tickets cost 50¢.

Shop Hoop Teams Meeting Tomorrow

The "first and only" organizational meeting for shop league basketball at Convair SD will be held tomorrow (Dec. 10) at 5 p.m. in the CRA Clubhouse on Pacific Hwy.

All departmental representatives wishing to enter teams are urged to attend. Gil Crosthwaite, commissioner, said eligibility, rosters, rules and nights of play will be decided at the meeting. League play is scheduled to start the week of Jan. 4.

Bonita Sweeps Next Tourney For Golf Club

Christmas hams will be prizes for winners at the next Convair Golf Club tournament scheduled for Dec. 19-20 at Bonita.

Entries are now open. Deadline is Dec. 16. San Diego golfers can make reservations with Alma, ext. 218, Plant 2; Astro golfers call Hal Purnell, ext. 1313, Astro.

Results of the tourney held Nov. 21-22 at Flying Hills included 16 turkey winners in four flights. Turkeys were awarded low gross winner in each flight and first, second and third low net.

In the first flight, Art King (Dept. 150 Astro) took low gross honors with a 71. Low net awards went to M. Goodall (Dept. 214 Astro), Jim Lothringer (Dept. 6 SD), and Wayne Boring (Dept. 551 Astro).

R. C. Vones (Dept. 603 SD) won low gross with a 77 in the second flight. First low net to R. Tobias (Dept. 541 Astro), followed by G. A. Hillis (Dept. 292 SD) and H. C. Van Buren (Dept. 292 SD).

Third flight low gross winner was K. Eastin (Dept. 69 SD). Filling in low net ranks were E. L. Williams (Dept. 100 SD), C. Ganger (Dept. 400 SD), and E. G. Farr (Dept. 181 SD).

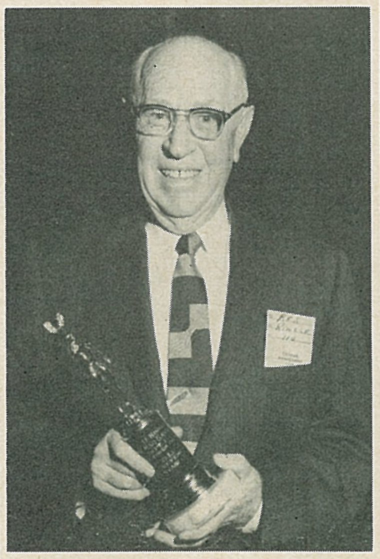
All four turkey winners in the fourth flight were from Convair SD. R. L. Lecuyer (Dept. 25) shot an 81 for the low gross. Top three low netters were H. Schroeder (Dept. 25), Jim Flitters (Dept. 15) and W. Hearth (Dept. 25).

GUN CLUB SLATES HOLIDAY TOURNEY

A variety of Christmas gifts will be prizes at a holiday shoot Dec. 19-20 planned by the Convair SD and Astronautics Gun Club at the CRA range, Gillespie Field.

Saturday competition will start at 1 p.m.; Sunday shooting starts at 9 a.m. and will progress through the day. Events will include skeet, trap and rifle in addition to novelty categories.

Novices, as well as experienced gun enthusiasts, will have an equal opportunity to win prizes. Merchandise awards will go to winners in each squad.



COST CUTTER—A. H. "Red" Kimble (Dept. 110) received MacSave-it award for October at last Convair SD Management Club meeting. His CIP will save Convair an estimated $65,000.

Two Drivers Surpass 100 mph In Sports Car Speed Event

Speed, a seldom required item in most sports car events, was the word recently when Astro Sports Car Club staged a one-quarter mile snail drag at Hour Glass Field.

Top speed of the day was reached by Wally Edwards (San Diego Division) with a 108.04-mile-per-hour run. He drove his "Wright Special." Joe Flores, also of SD, won the elimination run with a "Siata-Corvette." His time was 104.65 mph.

In the over-four litre sedan class, Jack Bowers drove his 1958 Plymouth "Fury" 87.80 mph.

The 1,300-2,000 cc class, largest in entries, found Dale R. Dollison first in a TR-3 with a speed of 74.93 mph. Mort Rosenbaum was second in his Arnolt-Bristol with a clocking of 79.36 mph.

Turkeys were presented winners.

Next meeting will be 7:30 p.m. tomorrow (Dec. 10) at the Astro executive dining room. Bill Lester will talk on Ferrari automobiles. Trophies for the recent event will be awarded.

XMAS TREE SALE TO START DEC. 15

Christmas trees will make their appearance next week on the lot outside the Employees' Store, across Pacific Highway from Plant 1 at Convair San Diego.

Douglas firs and colored trees from 2 to 10 feet tall will go on sale by next Tuesday (Dec. 15), said W. E. Rickman, store manager. A few silver tips will be available.

Both Convair San Diego and Astronautics people are eligible for discount prices which will be up to 50 per cent less than the retail price of Christmas trees this year, said Rickman.

Store hours are 9 a.m. to 9 p.m. Mondays through Fridays, and 9 a.m. to 5 p.m. on Saturdays from now until Christmas. Layaway service is offered Convair shoppers with purchases to be claimed by Dec. 22.

Choralaires Plan Hospital Concerts

Christmas week will be a busy one for Convair SD's Choralaires who have scheduled a number of Christmas appearances at hospitals in the San Diego area.

The visits will continue a tradition started some years ago by the vocal group, W. A. Vogel, director, said.

During the past month, the Choralaires shared the stage with the Convair Pomona Missilemen at a special concert in Pomona attended by over 600. On Nov. 29 the Choralaires were featured at a church dinner in Ocean Beach.

Jeep Club Invites Scouts on Outing

Convair SD's Jeep Club will host a group of SD Management Club-sponsored Air Explorer scouts the weekend of Dec. 12-13.

Ten scouts are expected to join the jeepsters for a rugged two-day, cross-country jaunt from Truckhaven on Hwy. 99 to Ocotillo on Hwy. 78. The caravan will leave Truckhaven Saturday morning at 8 p.m.

'Hare and Hounds' Set for Dec. 12

Sports Car Clubbers from Convair SD and Astronautics will compete in a Hare and Hounds event Saturday (Dec. 12).

First car will leave the San Diego Zoo parking lot at 7 p.m. The event will last about three hours and end at the Henry Langhorst Restaurant in La Mesa. No entry fee will be charged for members of the SD and Astro Sports Car Clubs.

El Cajon Range Site for Shoot

Next shoot for archers from Convair SD and Astronautics will be held Dec. 13 at the new El Cajon range, J. B. Bence, club spokesman reports.

Bence also reminded members that the next meeting for both SD and Astro archers is scheduled for Dec. 13 at Astro.

13 Pass State Engineer Test

Thirteen Convair men representing Astronautics and San Diego plants recently passed the California Professional Engineers Examinations.

Eleven of these were mechanical engineers, one an electrical engineer and one a civil engineer. All are now registered engineers in California.

The mechanical engineers included D. W. Gilbert, A. Segal and J. S. Gacho, all of SD's Dept. 6-35: L. H. Bakken and G. C. Wininger of SD's Dept. 6-31; J. H. Dowdy of SD's Dept. 6-51; J. K. Neary of SD's Dept. 6-80; P. F. Taesler of SD's Dept. 25-4; D. E. Merriam of Astro's Dept. 250-2; D. F. Postula of Astro's Dept. 595-1; and R. H. Thomas of Astro's Dept. 535-7.

Astro's C. G. Erickson of Dept. 547-3 was the electrical engineer and F. K. Killman of Astro's Dept. 250 was the civil engineer to complete the program.

To prepare for the next state examination the University of California Extension will start a new course in January. Further information about the program may be obtained through the State of California office, 3443 University Ave., AT-1-0427.

Bonham Brothers Tickets on Sale

Tickets for the Bonham Brothers band concert and variety show Dec. 21 at the Russ Auditorium are being sold at Convair SD employee services, Plants 1 and 2.

Many of the band members are sons of Convair parents. Proceeds from the concert will help defray expenses for the band when they represent the California and Nevada Lions Clubs at a parade in Chicago next July.

Benefit Is Planned For Square Dancers

Square dancers from both San Diego and Astronautics have been invited to take part in a "Toys for Tots" dance at 8 p.m. Friday (Dec. 11) at the La Mesa Elementary School, Acacia and Orange Sts., La Mesa.

Admission will be one toy per person, either new or slightly used, according to Lowell G. Foster of Astro's Dept. 213, secretary of the sponsoring Lariats Square Dance Club. All toys will be turned over to the Marine Corps "Toys for Tots" program. Caller will be Ken Reid.

Camera Club Cuts December Meeting

A CRA Camera Club meeting scheduled for Dec. 23 has been cancelled because of the Christmas holidays.

Next meeting for the Convair SD lens group is scheduled for Jan. 14 at 7:30 p.m. in the Photo Arts Bldg., Balboa Park. The meeting will include the quarterly contest for the last three months of 1959.

CRA Dance Classes Moved to Pacific

Transfer of Astro and SD CRA ballroom dancing classes to Pacific Ballroom, 1106 Broadway, was completed last week.

Under the direction of Grace and Bill McGrath, the program includes instruction from beginning through advanced social and Latin dancing.

Shortly after the first of the year a new series of dancing classes will be started.



ON TOUR—Forty Convair SD students in CRA-sponsored Spanish class were "good will" visitors last month on trip to Tijuana, visited such places as Chamber of Commerce, Foreign Club, and toured residential areas. In picture, students try out newly-learned Spanish in Tijuana newspaper office, home of El Mexicano.

CRA Sports & Recreation Convairiety

New Series of Spanish Courses Due to Start After First of Year

A new series of free courses in conversational Spanish will be sponsored by the Convair SD Recreation Association starting the first week in January.

Classes for beginning, intermediate and advanced students have been scheduled.

The first CRA-sponsored Spanish course will end next week. J. K. Field, SD employee services chief, said that the popularity of the course has prompted the CRA to schedule a new series of instruction after the Christmas holidays.

Classes will again be open to all Convair SD employees and family members. Jim Hardison (Dept. 15-1) will instruct beginning and intermediate students; Mrs. Elba Peralta, wife of Manuel Peralta (Dept. 6), will conduct the advanced class.

Instruction for beginners and advanced students will be held Monday evenings, starting Jan. 4. Beginners will meet in Room 6 of the Balboa Park Conference Bldg. and the advanced class in Room 2.

Intermediate instruction will be held on a Thursday evening schedule starting Jan. 7 in Room 4 of the Conference Bldg.

Hours for all classes are the same. They will last for two-and-one-half hours, from 7-9:30 p.m., for 15½ weeks.

To register either attend the first class or contact employee services, ext. 1245, Plant 1. Main purpose of course is to give students a "working" knowledge of the Spanish language. Customs, etiquette and other tips for the visitor to Mexico are discussed.

45 WIN TURKEYS IN KEG LEAGUES

Forty-five bowlers in Convair SD leagues had turkeys supplied by the CRA for their Thanksgiving dinners. The awards were scattered through the more than 20 leagues sponsored by the CRA.

Winners in day-shift leagues were: Doris Schauttet, Bill Taylor, William Vecera, Don Lauder, Robert Schuchman, Jack Hitchens, Forrest Strand, Robert Coon, M. Gingrich, J. Knoke, Alyne North, Edith Hood, Bud Sickles, Bob Mohr, A. Cappelan, G. Troy, G. Hauswirth, Bertha Burch, V. Sammons, G. Pendleton, C. Amaro, Roger Wallace.

And: Roger Wagner, Roswell Bolte, Jim Lothringer, John Zupon, R. Dean, Don Rea, Perry Brown, Tony Carragal, Don Sanchez, Barbara Standish, Chase Allen, Charles McWilliams.

Swing-shift winners were: Gordon Seyler, Mike Brooks, Tony Schurrer, John Gay, Jim Hayman, Frank Deguide, Dick Beauclair, Ted Jones Jr., Marge West, Earl LaFontaine, Bob Perrington.

Three Win Turkeys In Pistol Tourney

Paper turkeys were targets, but real birds were prizes in a Convair SD Pistol Club tourney Nov. 22.

Taking home turkeys in the shoot were Carl Hornburg (Dept. 166), Ralph Picard (Dept. 7) and Ralph Benson.

In the .22 police course competition B. L. Broadway (Dept. 603) led entries in the master class with 294 points. Hornburg paced the expert class with 282 points and Harvey Ingalls (Dept. 6) took sharpshooter honors with 264 points.

A new club member, J. B. Carroll (Dept. 3-1), tallied 278 points to win the short national match event.

Swap Session Set For SD Radio Club

Second annual swap night of the Convair SD Radio Club will be held in conjunction with a meeting tomorrow (Dec. 10) starting at 7:30 p.m. in the ham headquarters on Harbor Drive.

J. B. Baker, commissioner, said members of the Rohr, Ryan and Imperial Beach Radio Clubs have been invited to the meeting and swap session. An additional guest will be J. W. Cruse, Federal Communications Commission engineer.

1960 Tourney Golf Schedule

(CGC stands for Convair Golf Club. CRA-SD stands for San Diego event.)

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Jan. 16-17, CRA-SD sweepstakes, Circle R (see note).

Jan. 23-24, 30, CGC sweepstakes. Rancho Santa Fe.

Feb. 6-7, CRA-SD sweepstakes, Rancho Santa Fe.

Feb. 20-21, CGC sweepstakes, Bonita.

March 12-13, CRA-SD sweepstakes, Bonita.

March 26-27, CGC sweepstakes, Circle R.

April 2-3, 9-10, CRA-SD Yater Memorial, Flying Hills.

April 23-24 and 30, CGC sweepstakes, Rancho Santa Fe.

May (dates to be set later), Industrial Assoc. match play.

June 12, 19, 25-26, CGC championships, Torrey Pines, Flying Hills, Rancho Santa Fe.

July 9-10, CRA-SD sweepstakes, Caliente.

July 23-24, CGC sweepstakes, El Camino.

Aug. 6-7, CRA-SD sweepstakes, Coronado.

Aug. 20-21, CGC sweepstakes, Coronado.

Sept. 4, 11, 18, CRA-SD 54-hole championship play, Circle R.

Oct. 8-9, CRA-SD sweepstakes, El Camino.

Oct. 22-23, CGC sweepstakes, Flying Hills.

Nov. 5-6, CRA-SD sweepstakes, Flying Hills.

Nov. 19-20, 26, CGC sweepstakes, Rancho Santa Fe.

Dec. 3-4, CRA-SD sweepstakes, Torrey Pines.

Dec. 17-18, CGC sweepstakes, El Camino.

NOTE: CRA-SD players must compete in two of first three (January, February, March) tournaments to qualify for Convair inter-plant matches to be held May 1 and June 5. The former to be played at Gilman Hot Springs and the latter at Circle R.

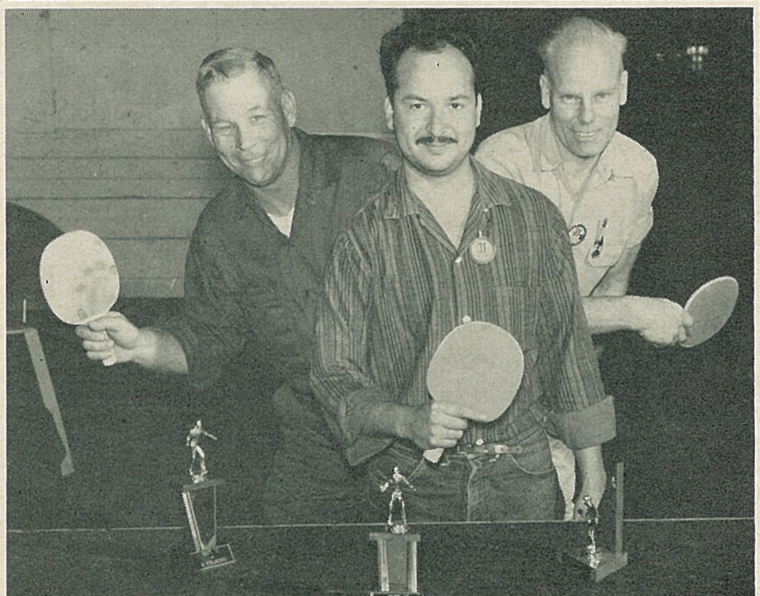
Win Streak Spurs Girls' Hoop Team

If practice games are an indication, the Convair SD girls' hoop team will be a leading contender for league honors.

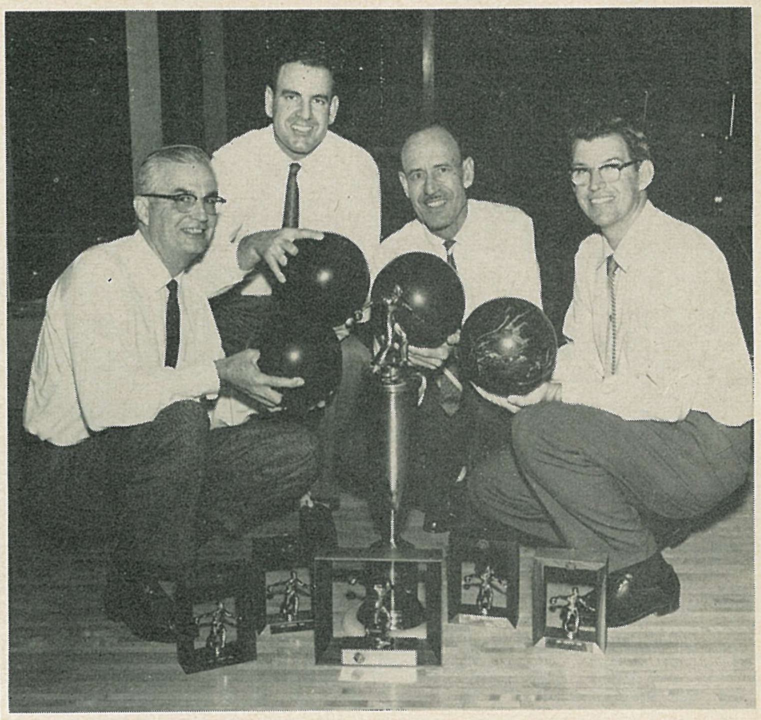
The girls have breezed through their practice games, drubbing opponents by such scores as 43-8, 77-31 and 50-36. The Convair team started out on the right foot in the annual pre-season tourney last week, winning 42-9.

The Convair gals are defending champions in the tourney which is scheduled to wind up on Dec. 17. Games are played Monday evenings, at either 7 or 8:15 p.m., in the Hoover High School gymnasium. Finals will be played on Thursday (Dec. 17).

When regular league play starts on Jan. 4, games will be played on a Monday and Wednesday evening schedule at the Hoover High auditorium.



TOP THREE—Dept. 31 at Convair SD Bldg. 5 held playoff recently to decide table tennis champs. Ranked in top three positions were (from left): Myron Caldwell, second; Raul Calderon, first; and Richard Cox, third.



RECORD SETTERS—Convair SD keg team, the Prods, set record last month in Industrial Recreation Council tourney with series score of 2,835. Team members (from left) are: R. A. Bolte, Frank Reed, Bill Reed and Hal Farrar. Not available for picture was team member Bill Ravenscroft.

Convair Keglers Lead Way In Industrial Tournament

Seven Convair SD bowling teams placed on the awards list of the annual Industrial Recreation Council tourney which concluded play last month.

Convair SD totaled the largest number of winning teams in the competition which included over 170 team entries from Rohr, Astro, Solar and Stromberg-Carlson.

Topping the list of Convair winners were the Prods who handicapped a series score of 2,835 to set a tourney record and place first in the "all men's" division. Members of the team were Hal Farrar, Frank Reed, Bill Ravenscroft (all Dept. 6), Bill Reed and R. A. Bolte.

Other Convair SD winners in the same division were: Cathy's Music, third; Holly Rollers, fifth; Pin Artist, ninth; and Misfits, 11th. In addition, two Convair teams, the Eagles and Dreamers, placed second and third in the "mixed" division.

SD bowlers did equally well in snaring individual laurels, taking home four of eight awards. Among the gals, Helen Kiesel (wife of Rudy Kiesel, Dept. 31) won high individual game (scratch) with a 211 total. Marge Barber (Dept. 280) snared the high individual series with 535.

Top scratch game for the men was bowled by Vern Gideon (Dept. 6) with a 255. Arlie Winningham (Dept. 266) handicapped the high series score, tallying 700.

Ice Skaters Plan Christmas Party

A Christmas party for members of the CRA Ice Skating Club at Convair SD has been scheduled for Dec. 17 starting after the 6:30 p.m. lesson session at Iceland, 6055 Lake Murray Blvd.

Martha Woodberry, commissioner, said games, prizes and refreshments have been scheduled. Two turkeys will be prizes in a special drawing which is limited to those who have obtained membership cards in the club.

Members are reminded that the Dec. 24 and Dec. 31 sessions at the rink have been cancelled because of the Christmas holidays.

40-Second Flight Could Win Turkey

Rules for the next CRA Aeromodelers contest are brief. In fact, "anything that flies" is eligible for the Dec. 13 meet. Prize will be a Christmas turkey.

Anyone from Convair SD successfully keeping a plane in the air for at least 40 seconds will qualify for the turkey drawing at noon. The contest will start at 8:30 a.m. at the Clairmont-Mesa Blvd. field site.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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AEROMODELERS — "Open class" competition Dec. 13 at 8:30 a.m., Clairemont-Mesa Blvd. field.

ART CLUB — Christmas card design contest judging at meeting Dec. 15 at 7:30 p.m. in Convair studio, Spanish Village, Balboa Park.

BASKETBALL — Organizational meeting for shop league teams tomorrow (Dec. 10) in CRA Clubhouse on Pacific Hwy. at 5 p.m.

BRIDGE CLUB—Next session Tuesday (Dec. 15), 7:30 p.m., Hotel Barcelona, 4th and Juniper.

CAMERA CLUB — Dec. 23 meeting has been cancelled.

CHORALAIRES — Rehearsals each Monday evening at 7:30 in CRA Clubhouse on Pacific Hwy.

COIN CLUB — Election of officers at meeeting Dec. 15, 8 p.m., Hearing Aid Society Bldg., 3843 Herbert St.

GOLF — Entries now being taken at ext. 218, Plant 2, for Convair Golf Club tourney Dec. 19-20 at Bonita. Deadline is Dec. 16.

GUN CLUB — Christmas merchandise shoot Dec. 19 and 20 at CRA Range, Gillespie Field. Saturday competition starts at 1 p.m.; Sunday shooting starts at 9 a.m.

ICE SKATING — Christmas party Dec. 17, after 6:30 p.m. lesson session at Iceland, 6055 Lake Murray Blvd. No skating sessions on Dec. 24 and 31.

JUDO — Workouts every Thursday, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

JEEP CLUB — Cross-country trip to Ocotillo Dec. 12-13. Caravan leaves Truckhaven on Hwy. 99 at 8 a.m., Dec. 12.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admission: adults, 25¢; children 15¢.

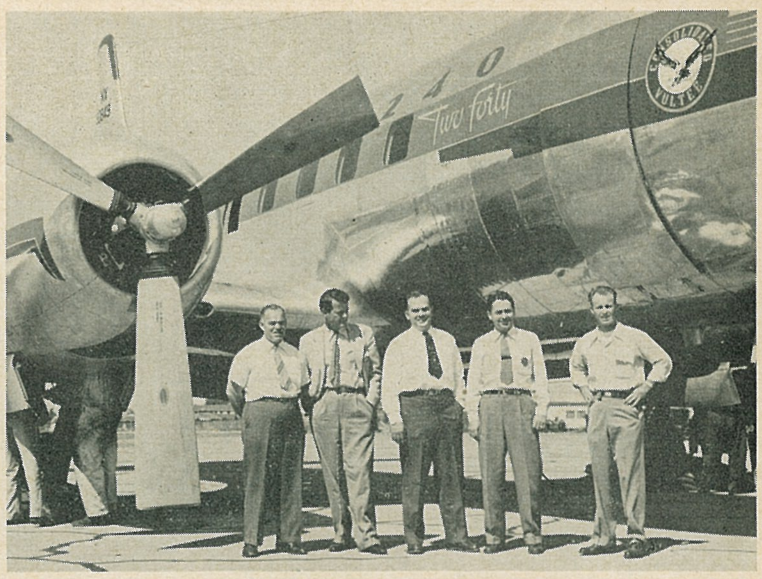
RADIO CLUB—Swap night in conjunction with meeting tomorrow evening (Dec. 10) at 7:30 in Harbor Drive headquarters.

SPANISH CLASSES — New schedule for beginners, intermediate and advanced students to start week of Jan. 4.

SQUARE DANCING — Christmas party for beginners and intermediate group 8 p.m., Dec. 21, American Legion Hall. Party for advanced group 8 p.m., Dec. 22, University Heights Community Center.



LAST OF LINE—Final Convair Model 440 being readied at Convair SD for delivery passes shakedown flight with flying colors. Checking data following initial flight are (from left) J. S. Carson, co-pilot; Harold Siegenfield, flight engineer; C. T. Scholl, pilot; V. V. Thomason, electronics engineer.



FIRST ONE—First Convair-Liner 240 built at Convair SD, now owned by The Garrett Corp., returned to San Diego recently to bid adieu to last 440. Above view shows plane before first flight March 16, 1947. Crew (from left) was R. R. Rogers, then director of flight and veteran test pilot, now deceased; E. D. Shannon, co-pilot; L. J. Bordelon, chief flight engineer; J. T. Ready Jr., chief flight test engineer; and William K. Ehmcke, flight test engineer.

Lower Cost Air Travel Noted As Key to Easing Tensions

Soviet Russia may make a serious appeal for disarmament at the next summit conference, in the opinion of Robert H. Trench Thompson.

Trench Thompson, U. S. manager of British Overseas Airways Corporation, told Convair Fort Worth Management Club members and wives at the November meeting at Ridglea Country Club that Russia is today "motivated by fear of her satellites."

"Russia is scared stiff of Red China," he said, "for Russia knows now that she has created a 'Frankenstein' which could turn on her at any time."

He pointed out that never in history have the Chinese people been assimilated by another country.

"The way to win today's ideological fight for men's minds and souls," he said, "is to get at the people . . . you visit them, and they visit you.

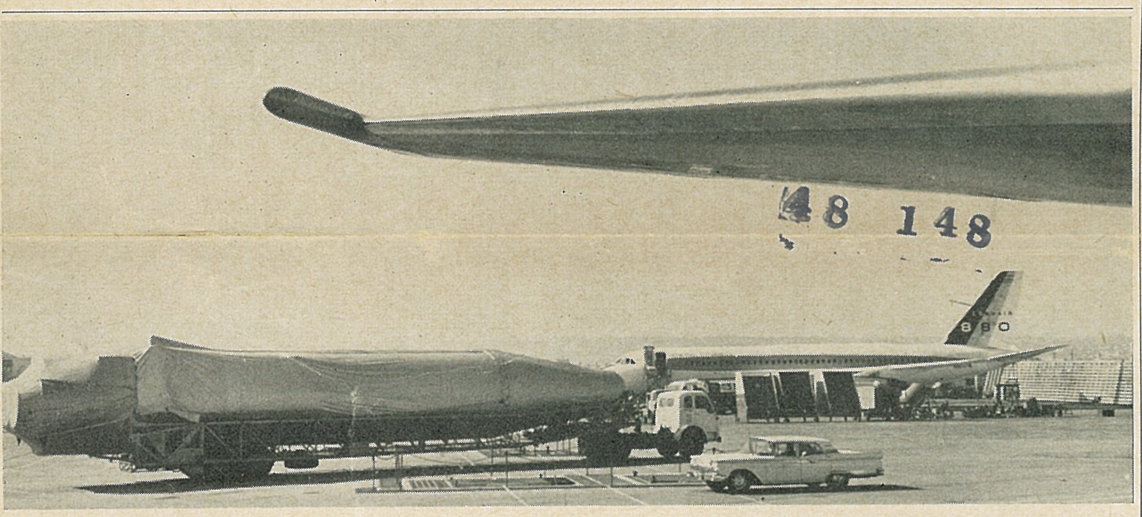
"Fortunately, a combination of better aircraft and lower-cost travel will make extensive travel by ordinary people possible in the years ahead."

Naval Office Title Changed to BuWeps

Title of the Navy office at Convair San Diego has been changed to Bureau of Naval Weapons Representative, effective Dec. 1.

With the consolidation of the Navy's Bureau of Ordnance and Bureau of Aeronautics at Washington, D.C., the former nomenclature of BuAer has been abolished. The new title abbreviation is BuWeps.

Capt. D. M. Wisehaupt has been representative of the Naval unit at Convair SD for the last two years.



UNUSUAL SIGHT—One of few pictures taken of Atlas missile and 880 together was snapped in yard at Plant 1, SD. Atlas had just finished checkout operations in Bldg. 4 and was being trucked back to Astronautics. Yard is regular "roost" for 880 fleet now in flight test. Overhead in foreground is tail section of another 880.

Last of Famous Series Of SD Convair-Liners Gets 'Job' With Mohawk

Last of the Convair-Liner 440s is due to leave San Diego for a delivery flight to Mohawk Airlines at Utica, N. Y., marking the end of a long line of propellor transports built at the San Diego plant.

Since initial flight of the first 240 in March, 1947, Convair SD production lines had turned out 1,075 of the twin-engine 240, 340, and 440 transports. Convair-Liners were phased out early this year when the Convair 880 jet transport went into production at SD Plant 1.

The Model 440 Metropolitan, last of the series, began rolling off the assembly line early in 1956. A total of 176 were built for domestic and foreign airlines. Of those aircraft remaining when production ended, all now have gone to new owners.

Deliveries this year saw six going to General Motors Corp., some to join an executive fleet at Detroit, Mich., and others going to Los Angeles for modification to a turbo-prop version.

Five of the aircraft have been purchased by Mohawk Airlines. The two transports purchased some time ago by REAL Airlines were due to leave for Brazil the first of this month, while two of the last 440s have arrived in Spain for the Iberia line. One 440 was sold to Mrs. Sarah Mellon Scaife and another is stored at Cheyenne, Wyo., pending delivery to Hughes Tool Co.

Convair San Diego field service representatives sent out to the last 440 customers are G. A. Pohlman at Madrid, Spain, for Iberia; L. L. Paul to General Motors in Los Angeles and W. R. Copeland to Detroit, also for GM.

C. E. Hill is Convair resident representative for Mohawk Airlines and E. J. Griffin is stationed at Sao Paulo, Brazil, for REAL.

Last shakedown flight the last of November saw C. T. Scholl at controls of the last 440 as pilot; J. S. Carson, co-pilot; Harold Siegenfield, flight engineer; and V. V. Thomason, electronics engineer.

With the 440s maintained at ready status ever since they rolled out of final assembly, the 1½-hour shakedown was called "routine" by the crew. The sturdy Convair-Liner was put through its paces at 10,000-feet altitude over the coastline north from Point Loma.

It was slated to have a couple of check flights before going through certification flight for the Federal Aviation Agency, last step before delivery.

Convair 440s Flying In Dozen Countries

Convair-Liner 440s are flying now for 42 companies, individuals, and airlines in 13 countries throughout the world. Six airlines in the United States and 19 foreign airlines have the twin-engine transports flying regular routes. Model 440s are flying in Canada, Italy, Australia, Belgium, South America, Switzerland, Japan, Spain, Germany, Finland, Norway, and Indonesia.

Social Security Tax Will Rise

Millions of people across the United States will do a double take when they see their first pay check for 1960.

Reason: an extra one-half of one per cent will be deducted for Social Security tax.

According to H. R. Bean, Fort Worth supervisor of payroll, this means that employees will then be paying three per cent on earnings up to $4,800. Employers match this, dollar for dollar.

If earnings amount to more than the $4,800 maximum, Social Security tax will be $144 in 1960, compared with $120 in 1959.

The law authorizing this increase was passed in mid-1958. It is in line with a gradual Social Security tax increase which has raised the deduction from one per cent in 1949 to the present three per cent.

Scrolls Recalling Service in B-36s Presented by SAC to Ex-Crewmen

SAC crewmen who flew B-36s are receiving individual scrolls attesting to their service in the airplane which for nearly a decade was the mainstay of SAC's global bomber force.

The certificates are on parchment, suitable for framing, and carry a reproduction of the American eagle and the B-36 under the heading of "The USAF Strategic Air Command, Underwriters of American Security."

Eligible are flight crew members, crew chiefs and assistant chiefs, line and flight chiefs.

SAC is undertaking to issue the scrolls to all former B-36 men now on active duty. Eligible former B-36 men no longer in SAC may obtain scrolls by applying in writing to the information officer of the base where they performed duty. Proof of assignment should be included.

Emmett McCabe, Convair director of advertising, sparked the project and Convair supplied the engraved scrolls, 9,500 of them.

B-36s, built by Convair at Fort Worth, first entered the SAC inventory in June, 1947. The last production model was delivered to the AF in August, 1954. Gradually replaced by all-jets, the last B-36 was officially retired in a ceremony at Amon Carter Field, Fort Worth, in February of this year and has since become a monument. The airplane is opened to the public Saturday and Sunday afternoons and Convair FW volunteers conduct the tours. Convair FW Management Club is responsible for upkeep.



FOR B-36 MEN—Lt. Gen. Francis H. Griswold, SAC Vice Commander in Chief, right, presents first of B-36 scrolls to four other SAC generals who served in B-36s. From left, Maj. Gen. W. K. Martin; Maj. Gen. E. B. Broadhurst; Brig. Gen. C. M. Eisenhart, Maj. Gen. J. V. Edmundson.



AULD LANG SYNE—Curious examine last B-36 at Amon Carter Field, Fort Worth. Photo was made last summer (accounting for shirt sleeves). Convair FW men conduct tours weekend afternoons.

C-V CONVAIR

Published every other Wednesday.

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Convair Division of General Dynamics Corporation.

Convairiety

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Vol. 12, No. 26

Tuesday, December 22, 1959

SAN DIEGO, POMONA, ANTELOPE VALLEY, VANDENBERG AFB, CALIF. AFMTC, CAPE CANAVERAL, FLA., FORT WORTH, TEX.



Merry Christmas To All Convair

"It is my sincere wish that the approaching holiday season will be both joyous and memorable for members of the General Dynamics family everywhere.

"I am certain that your achievements during the year now ending have played a significant role in making it possible for the nations of the free world to celebrate another secure and Merry Christmas, and to welcome the new decade with hope and confidence."

Frank Pace Jr.
Chairman of the Board.

* * *

This week we pause in our daily endeavors to celebrate the birthday of the Prince of Peace.

It is a time of rejoicing and gift-giving. In our celebration, however, let us remember the true meaning of Christmas, and may His Spirit be in your homes and His teachings continue to bring tolerance and understanding in a troubled world.

J. V. Naish,
President of Convair.

New World Speed Mark Set by F-106

A U.S. Air Force F-106, flying from Edwards AFB on the Mojave Desert, last week set a new world speed record of 1,525.95 mph over a straightaway course at 40,550 feet.

Maj. Joseph W. Rogers, ADC pilot, beat the previous world mark of 1,404 mph (set by a F-104) by 121 miles. He also exceeded the record of 1,483 claimed by the Soviet Union.

The F-106 flown by Rogers was a regular production model, built at Convair SD. It was instrumented and configured to normal combat weight.

The run was made both east to west and west to east to conform with Federation Aeronautique Internationale requirements for an official record. The accepted mark, an average of the two runs, was 2.35 times the speed of sound.

Five squadrons of F-106s, which can be armed with the MB-1 Genie atomic warhead rocket, are in service with the Air Defense Command.

Observation aircraft and ground radar were used to track the F-106.

Both Maj. Rogers and Convair pilots who flew the plane in checkout lauded the F-106 in superlative language.

Rogers said stability was excellent and deceleration was extremely smooth.

The plane, a routine production ship that had been in use for other tests previously, was maintained during the test series by crack Convair crews of mechanics, electricians and technicians.

C. O. Hill, Convair chief of field operations at Edwards, said that considering the comparatively brief time involved, the crews performed magnificently in readying the ship.

"I cannot speak too highly of the spirit and devotion of these ground crewmen. Specialists in a variety of fields, they worked together like the parts of a fine watch on this particular task, as on all maintenance assignments."

Pilot James K. Stuart of Convair engineering test flight, who flew the checkout on the airplane prior to the actual timed run, said:

"The check flight was perfect. No squawks. Thanks to some mighty efficient ground crews, the airplane was ready to go all out right then, without any additional tuning."

The F-106's greatest speed was reached on the east to west run, 1,536.46 mph.

There were 16 National Aeronautics Association officials present to time and observe the record-breaking dashes.

New Assignments in GO to Better Coordinate Transport Efforts

Several new assignments of responsibility in General Office, aimed at better coordinating transport systems sales efforts, were announced this month by President Jack Naish.

R. C. Sebold, vice president-engineering, has been given overall responsibility for coordination among operating divisions of Convair and C. L. Blake, has been appointed transport systems development manager, reporting to Sebold.



C. L. Blake

"A major part of our business in the past has been building airplanes. Now, the inroads of missile weapon systems leave only the area of transportation systems where we can feel fairly certain that airplanes will continue to be built. As a result, I wish to greatly increase our efforts in the transportation field on a coordinated basis.

"The Fort Worth and San Diego operating divisions are extremely interested in transport systems and our Pomona operating division is developing an increasing capability in air traffic control . . . We must insure that the combined efforts of these operating divisions are compatible to the end that we do the very best job possible to obtain new business."

Blake, a native of Nashville, Tenn., holds degrees in aerodynamics from Louisiana State University. He joined Convair first in engineering at SD in 1941, left to take an executive post in the Office of Secretary of Defense in 1951, returned in 1954 to Convair as a staff engineer in General Office.

★ ★ ★

With Convair's commercial jet program at an "extremely vital stage with respect to future sales activities," President Jack Naish has appointed C. L. Meador acting director of contracts in General Office "in order that the vice president-commercial sales and contracts (J. G. Zevely) may direct his undivided attention toward the sale of commercial aircraft during this period."

Meador, who has been contracts manager, will have overall responsibility for negotiating sales contracts, acting through operating division contracts departments as necessary.



C. L. Meador

A Missourian, Meador came to Convair SD in 1940, moved to Convair FW in 1942 in estimating, served in the U. S. Army from 1944 to 1946 when he returned to Convair SD in contracts, first as an executive assistant and then as contract coordinator. He shifted to General Office in 1953 as assistant to the contracts director.

Seven More at SD Earn Color Photos

Seven more Employee Suggestions during the past month have earned bonus awards in the form of color photograph sets of Convair planes and missiles.

Under the revised Convair SD Employee Suggestion system the photograph sets are given in addition to cash awards. Latest winners are L. E. Dechert (Dept. 325-1), O. E. Hutchings (Dept. 325-1), Gerhard Hartwig (Dept. 25), John H. Tanner (Dept. 321-2), Edwardo E. Martinez (Dept. 204), Ruth Flower (Dept. 93-2), and W. V. DeVilibiss (Dept. 137).

HORACE OHMER, AF DEPUTY REP., DIES

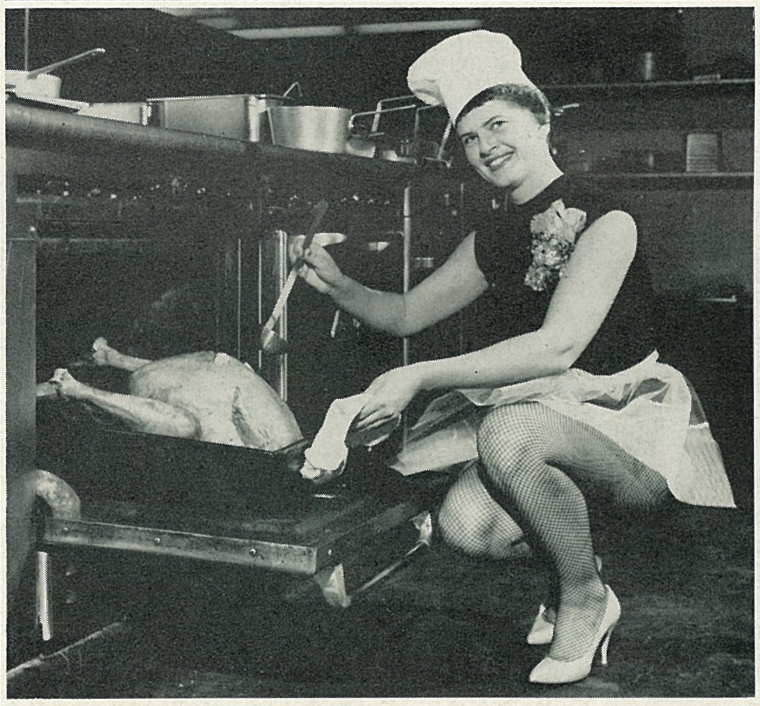
Horace G. Ohmer, who had been with the AF office at Convair San Diego for nine years, died last week (Dec. 17) after a short illness.

Ohmer came to Convair SD in July, 1950, to serve in a dual capacity, as civilian assistant to the AF officer in charge and chief of the contract division.

In September, 1954, he was named deputy AF plant representative, a post he has held ever since.

Born Feb. 24, 1897, in Dayton, Ohio, he began his career with the Air Force in 1942 at Wright-Patterson AFB. He came to Convair from the Los Angeles AF procurement field office.

Surviving are his wife, Shirley, and two sons, Craig, 9, and Chuck, 14.



ABOUT READY—Lorraine Sem of Astronautics security makes attractive chef as she bastes turkey being prepared for Convair San Diego and Astronautics employees tomorrow in plant cafeterias, for special $1 holiday meal. Christmas dinner at SD Plants 1 and 2, and Astro will give choice of turkey or ham.

IAS Chapter to Hear SD's Dr. W. A. Martin

"Experimental Tools of Hypersonic Aerodynamics" will be discussed by Convair SD's Dr. Walter A. Martin Jan. 5 at a meeting of the San Diego chapter of the Institute of Aeronautical Sciences at 7:30 p.m. in the IAS Building, 3380 Harbor Drive.

Dr. Martin is with the theoretical aerodynamics group at Convair SD.



600 TRAINING—W. E. Ritter of Convair SD experimental (at far right) shows proper operation of heat dimpling machine in new 600 pod, pylon, engine buildup department to (from left) W. A. Shoemaker, H. J. Quick, J. C. Marries, O. W. Dare, and D. A. Jones.

Power Package Dept. For 600 To Encourage 'On-Job' Ideas

A training program with a new concept is gaining momentum in Convair San Diego's new department for production of the power package for Convair 600 jet transports.

"We are not only going to use new materials and new methods in this department, but a new emphasis on ideas," explained C. W. Clark. "Every person in Dept. 140 will be urged to take an active part in the improvement of the product."

Clark, with W. S. Nader, is responsible for 600 pod, pylon, and engine buildup.

Men on the job will be encouraged to submit their own ideas for improving quality and keeping costs down. Suggestions will be passed on through a group leader for immediate action.

"We are trying to make the fullest use of team effort," said Clark.

All supervision in Dept. 140 will attend a management techniques course to establish a better working relationship with the people reporting to them. They also will study budgeting, job loading, and operations analysis.

Everyone in the department will take courses in production procedures and controls, to become familiar with the various forms used in shop work; and in manufacturing procedures and specifications, which will teach methods in use of unfamiliar materials and tools.

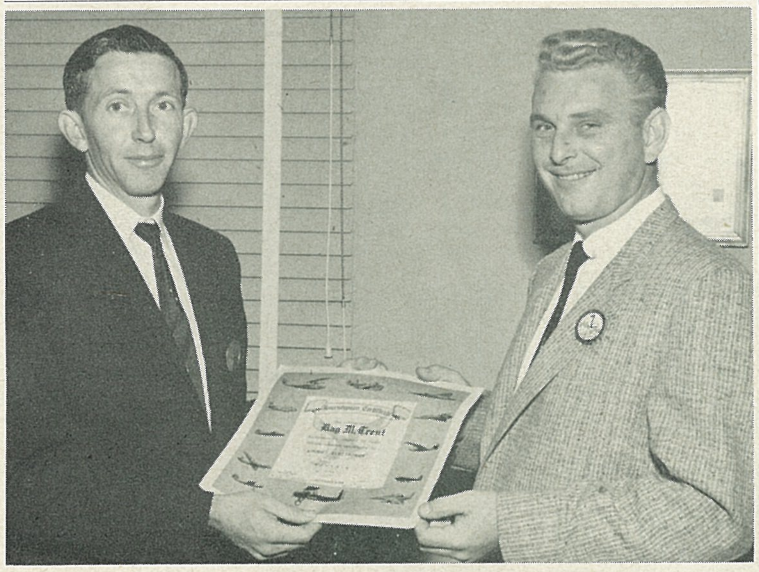
With the use of high-temperature resistant materials in the 600 engine shroud, Convair SD people must learn completely new operations in the handling of the three materials—stainless steel, titanium, and aluminum alloys—which go to make up the pod, as well as the unfamiliar types of fasteners to be used.

In other courses of the seven-part training program coordinated by W. E. Newton of SD educational services, ten men have been certified on the new triple action heat dimpling machine, first of its kind at Convair SD. The machine, forms recesses for rivets in parts too thin to countersink so that two sheets are nested and fastened together securely. It handles a wider range of material with controlled heat.

A three-hour course will be given in preparation of material for heat dimpling.

Those assigned to buildup of the CJ-805-21 aft fan engine will be taught every step in hooking up and installing the engine. The 600 power packages will come out of Dept. 140 as complete units ready to go on the planes.

"Our end objective," said Clark, "is to build the finest possible finished engine package with highest standards of quality and reliability, conforming to economical cost specifications, and meeting production schedules."



END OF COURSE—Ray M. Trent (right) beams on receiving certificate signifying successful completion of four-year electronic apprenticeship course at Convair SD. Ed Huggin (Dept. 7) is making presentation.

★ Convairiety ★

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FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Susan Bagby, Mary Beck.

Pomona Editorial Offices, Room K-222, Bldg. 2, ext. 6226, mail zone 3-8. Staff: James Combs Jr., news editor; Dorothy Keller.

Antelope Valley Editorial Office, Room 103, Bldg. 301 B, Palmdale, ext. 337. Staff: Richard L. Millett.

F-106 Arrives At McClellan

First F-106 has arrived at McClellan AFB, near Sacramento, Calif., with designation of Sacramento Air Materiel Area as specialized repair activity for the F-106.

F-106s will be sent to McClellan for modification, maintenance, and technical order compliance.

The first plane will be used for ground training of maintenance personnel who have received ground school courses at Convair San Diego within the last few months. Sixteen maintenance supervisors recently completed a one-week briefing at SD while a five-week course was held for a large group last summer.

Second F-106 is scheduled to arrive at the base after the first of the year. It will be completely disassembled and reassembled for checkout of tooling, work procedures, material standards, and work documents.

The actual maintenance project, involving 294 aircraft, will begin next July and extend over 26 months.

G. H. Hall is stationed at McClellan as Convair SD field service representative.

$4,595 in Donations Okayed in Nov., Dec.

Donations of $4,595 were approved by Convair San Diego Employees' Con-Trib-Club during the months of November and December.

Hillcrest Receiving Home of San Diego will receive $500; North Antelope Valley Community Chest, $1,807.50; South Antelope Valley Community Chest, $987.50; and Salvation Army of San Diego, $1,000. Subscriptions to 30 magazines which go regularly to Vauclain Home were renewed for three years, totaling $300.

In addition to the charity donations, $3,567.62 was distributed last month to 29 Convair people through the Emergency Aid Fund.

Blood Bank Credit Upped by 77 Pints

Convair SD's credit at the San Diego Blood Bank was boosted by 77 pints at the Dec. 10 bloodmobile visit.

Half of the 150 volunteers from Plant 1 second-shift people were accepted as donors, said Ken Wulfemeyer of SD employee services.

Since Convair SD now has enough blood on hand to supply the demand for several weeks, next visit will be Feb. 25.

RESERVE PILOTS ON ACTIVE DUTY

Ralph F. Kalal (Astro Dept. 545-3) and George L. Chingas (SD Dept. 15-6) recently completed two weeks of Naval Air Reserve training with anti-submarine squadron VS-776 at Los Alamitos NAS.

Cost Reduction Honor Roll

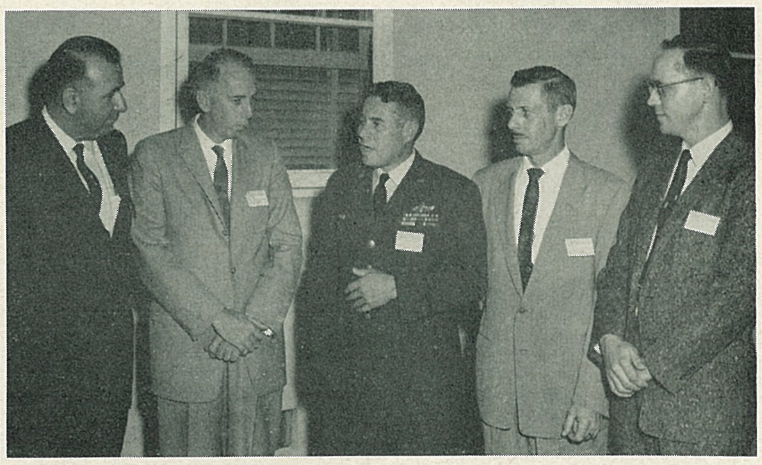
Installed during the last two weeks:



M. C. Brady's (Dept. 6-35) CIP will save $55,188 a year.



Gwen Hoyt's (Dept. 324-0) ES will save $1,631 a year.



AT CONFERENCE—Attending Air Force-Aircraft Industry Conference in November at Norton AFB, Calif., were, from left: Paul D. Ferrara, then SD chief of equipment design, now Astronautics assistant chief engineer—administration; Chester Owen, SD inspection; Brig. Gen. W. E. Arnold, AF Director of Flight and Missile Safety Research; Dan Scott, Convair field service representative; Les Norwood, SD service engineering.

Paul Ferrara Goes to Astro

Paul D. Ferrara, a Convair engineer since 1939, has been appointed assistant chief engineer for administration at Convair Astronautics by J. R. Dempsey, Convair vice president and Astronautics manager.

Ferrara succeeds George M. Robertson who has been promoted to Dempsey's staff as assistant for administration to help in further diversification of products and techniques.

A graduate of Heald College of Engineering, San Francisco, Ferrara joined Convair in 1939 as an electrical designer at Vultee Field. He moved to Convair San Diego in 1947 as a senior design group engineer.

Succeeding Ferrara as chief of equipment design at Convair SD will be W. T. Dorrance, SD engineering staff specialist. A native of North Dakota, Dorrance has been with SD engineering since 1942.

Since the appointment will not become effective until Jan. 15, D. G. Moody, senior group engineer in avionics, armament and acoustics, is now acting chief of equipment design. D. C. Worden of the Model 8 project office will assume Dorrance's present responsibilities.

Estimating Society In SD Elects Ashe As First President

R. F. Ashe, director of budgets and estimating for Convair, is first president of the newly-organized professional group, Industrial Estimating Society of San Diego.

Three other Convair men will have leading roles in the society. Lewis Grant, Convair SD change estimating supervisor, is treasurer; L. H. Boggess, Astro chief of estimating, secretary; and A. O. Brymer, Convair budget administrator, director of education.

Other officers and directors are D. H. Wright of Ryan Aeronautical Co., vice president; B. C. Crabtree of Solar Aircraft, director of programs; T. R. Massey of Ryan, director of membership; and M. E. Humphrey of Rohr Aircraft Corp., director of publicity and publications.

First meeting will be Jan. 5 at the Catamaran Hotel, Pacific Beach Drive, with dinner at 6 p.m.

Speaker will be C. A. Stillwagen, vice president of finance at Ryan.

Convair SD people may get ticket information from Grant, ext. 1451, or Ashe, ext. 1296, both Plant 1.

400 Attend Astro's Annual Fall Dance

VANDENBERG AFB — About 400 Astronautics employees here and their guests were on hand Nov. 17 at the Veteran's Memorial Hall, Santa Maria, for the annual fall dance.

Featured were comedy skits presented by Astro employees. A buffet was served.

CONTROLLER DANCE SLATED FOR DEC. 26 IN EL CORTEZ HOTEL

Tickets are now on sale for Convair SD controllers' annual holiday dance.

The dance is set for Dec. 26 from 9 p.m. to 1 a.m. in the Caribbean Room of El Cortez Hotel. Francis Leonard and his orchestra will play. Cash door prizes will be given away and snack refreshments of potato chips and peanuts provided, said George Withem, general chairman.

Tickets, at $1 per person, can be purchased from anyone in the controllers' department or at the door on the night of the dance.

Withem's committee includes H. B. Day, K. A. Kerr, E. A. Guttzeit, H. J. Woods, Carlene Hoff, Pat McDairmant, and R. E. Gunnerson. Hostesses will be Sharon Mecham, Mary Peterson, Joan Liggett, Hazel Mathews, Carlene Hoff, and Pat McDairmant.

Gunnerson, who is in charge of ticket sales, may be reached on ext. 1901, Plant 1, for further information.

Needy 'Adopted' At Vandenberg

VANDENBERG AFB — Astronautics employees will assure a Merry Christmas for at least 10 local needy families through the efforts of each of 10 major functions here.

Each has appointed committees to serve. They will see that families to be "adopted" receive food, clothing and toys for the youngsters through donations made within their groups.

Employee services here, working with local charities, churches and schools, has helped compile information on families and their needs. This information was turned over to individual groups.

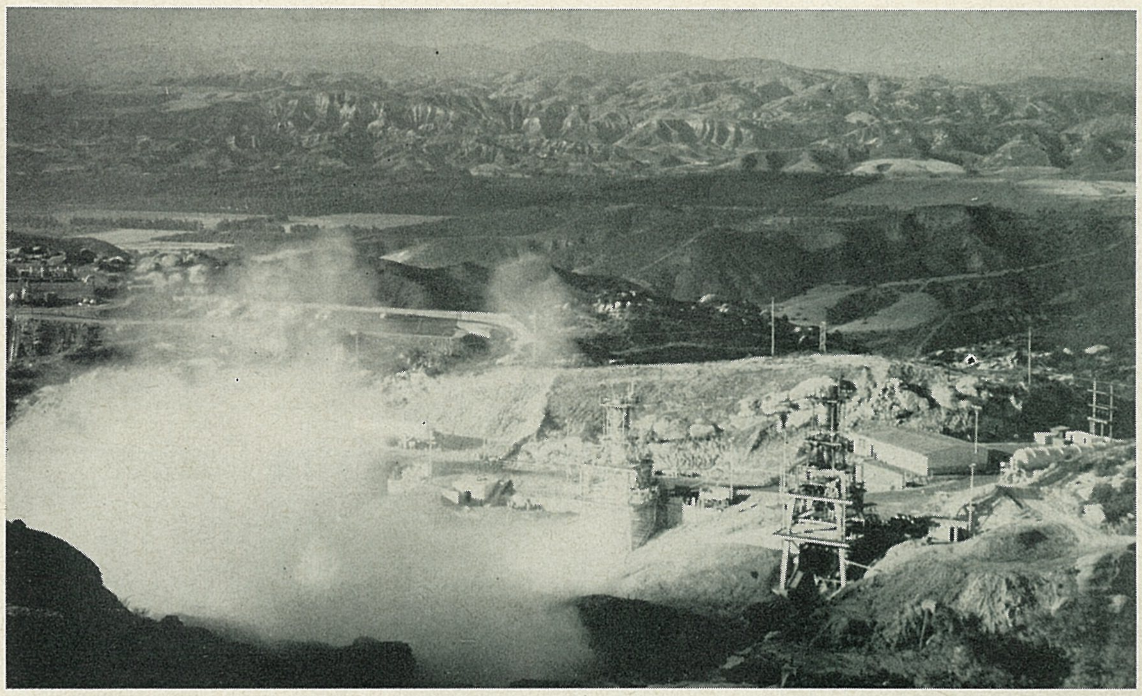
Representing functions as chairmen of their groups are: Lucy Maloney, material; Bernice Frisby, operations; R. C. Cook, inspection; Ruth Traxler, product support; Dick Baker, engineering; Gladys Balsam, industrial relations; P. Washburn, administrative support; G. D. Matchette, site engineering; and Maureen Gray, design.

Frivaldsky Loaned Tri-Hospital Drive

Joe Frivaldsky, Astro labor relations representative and a member of the Employees' Con-Trib-Club Committee, has been appointed co-chairman of the Industrial A Division of the Tri-Hospital Building Fund Drive.

Frivaldsky will be on loan from Astronautics to serve with Julian Ashe of the International Association of Machinists who organized the division when the campaign began in early 1959.

Recessed because of the annual United Fund Drive, the Tri-Hospital program will resume operations Jan. 4.



AWESOME—These are test stands in Santa Susana mountains where mighty rocket engines are test run. Among them are engines for Atlas missiles.

Atlas Engines Roar in Checkouts Scant 35 Miles From Downtown LA

BY BRYAN WEICKERSHEIMMER
(Convairiety News Editor, Astronautics)

CANOGA PARK, CALIF. — High above this west San Fernando Valley community, only 35 miles from downtown Los Angeles, rocket engines for the Atlas missile receive their first "workout."

Test stands, anchored in natural rock formations, hold the engines in place while they run for a few seconds or a few minutes, depending upon programming.

Called the "propulsion field laboratory," the site is operated by Rocketdyne, a division of North American Aviation, Inc. and an Atlas program associate contractor. Rocketdyne owns the site jointly with military agencies.

Within a 1,700-acre site Rocketdyne has assembled the greatest array of high thrust engine test facilities in the nation. Through these same Santa Susana mountains the old Butterfield stage line once passed and California's famed bandit, Joaquin Murietta, hid out from lawmen. The area contains many towering rocky cliffs and canyons. Deer and other wild animals feed amidst hillsides blackened by engine exhausts.

A natural valley stretching some three miles contains 19 major test stands, four major component test laboratories and a bevy of administration and support buildings.

Although smaller in size, test stands look much like those Astro uses to test Atlas missiles at Sycamore Canyon. Single engines or clusters are tested at one time. Normally, several test stands are grouped together and controlled from a single blockhouse. They are designated by such terms as Alpha, Bravo, Cocoa, etc. Fuel and water tanks stand on nearby hilltops. Access to each area is controlled and winking red, amber and green lights signify conditions at the test stand. Sirens warn of pending runs.



AT ROCKETDYNE — At left is Astronautics representative at Rocketdyne, Henry Palan, lead propulsion design engineer. At right is E. B. Monteath, Rocketdyne's Atlas program manager.

In addition to Atlas engine tests, Rocketdyne utilizes the area for tests on engines for the Thor and Jupiter missiles, plus various research projects.

The present Atlas propulsion system is known as the "MA-3." It is a later version of the "MA-2" and earlier "MA-1" first developed for the Atlas in a program that goes back to 1954. The first propulsion system was turned over to Astro in June, 1956.

"MA-3" consists of a twin-chambered booster engine generating 300,000 pounds of thrust. This unit lifts the Atlas and sends it rocketing along on the first stage of its journey. A sustainer engine of 60,000 pounds thrust is ignited upon launch and continues to propel the Atlas after the booster has been jettisoned. It is designed to function in the thin air of higher altitudes. Twin verniers complete the power package and provide roll control.

Rocketdyne once fabricated the complete propulsion system here at Canoga Park in a modern factory. However, the "MA-3" work is being divided, with the booster being built at a Neosho, Mo., plant of Rocketdyne and the remainder here at Canoga Park.

Side-by-side assembly lines turn out Rocketdyne's various propulsion systems. Atlas engines ride toward completion on special assembly fixtures, passing through a series of stations where subassemblies are affixed. One noteworthy area turns out the unique thrust chambers which must be cooled during flight to withstand temperatures of over 5,000 degrees. This is done by passing the Atlas' RP-1 fuel through hollow tubes which form the chamber walls and back to the combustion chamber for burning.

Once completed, engines are subjected to a series of special checkouts prior to being sent "up the hill" to the field laboratory. Following actual runs, the engines are returned to the factory for clean-up and loading aboard special trailers for the trip to Astro.

Representing Astronautics at Rocketdyne is Henry Palan, a lead propulsion design engineer. He administers all present and future programs, sits in on meetings and acts as liaison in all Astro matters. One of his closest contacts is E. B. Monteath, Rocketdyne's Atlas program manager.

In turn, Rocketdyne maintains a staff at Astronautics of about 38 people headed by Ed Strain, field service representative in charge. In this group are instructors, modification mechanics and engineers. In addition, other Rocketdyne employees are assigned to off-site locations.

Some of the projects talked of here tax even the most imaginative. For instance, a single chambered engine now in development would produce 1½-million pounds of thrust. And in the future, engineers speak of engines powerful enough to lift a Navy light cruiser or place a 300,000-pound satellite into orbit. This within the next 25 years!

New Dispatch Boards to Show Arrivals, Departures of Planes

New dispatch boards are going up in Convair San Diego's flight operations office to replace the old-type blackboards.

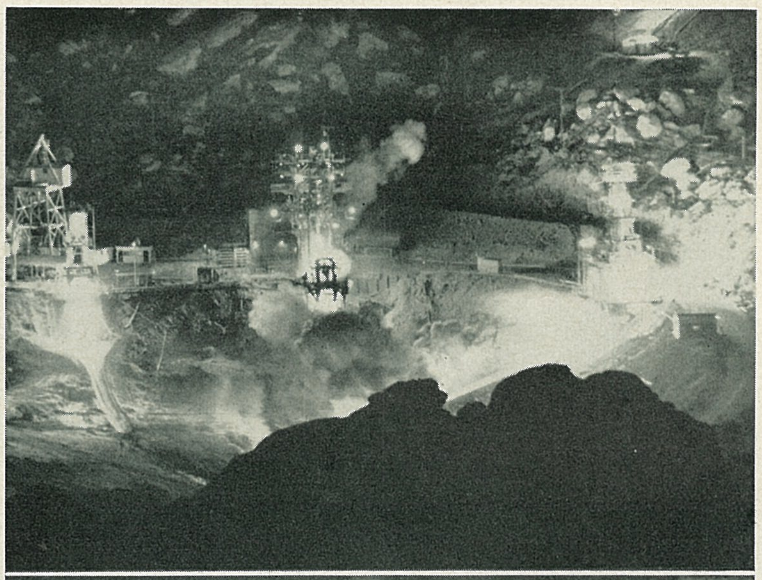
The new boards of masonite and plexiglass are designed from plans used at Convair Fort Worth when similar boards were installed there earlier this year. Two boards, 5x8 and 4x7 feet, will be erected in the flight dispatch office on second floor Bldg. 4 at Plant 1. One will schedule all Convair plane arrivals and departures, including test flights of Convair 880s, and the other will be used for status of plane production.

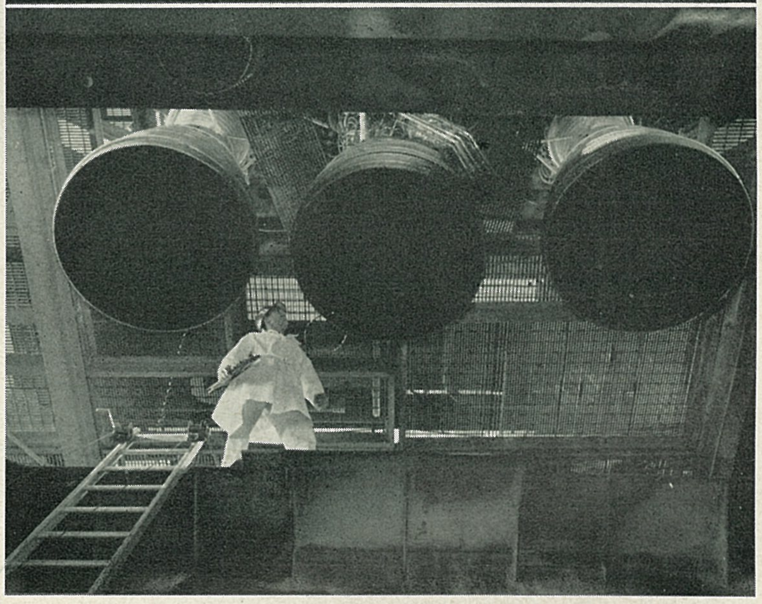
Dispatchers will use grease pencil on the glass boards for better visibility. R. E. Flanery heads the office as chief dispatcher assisted by Loren Blackburn.

In other remodeling now in progress, a new counter and rail have been placed around the flight dispatch office to provide more space in the aisle.

A new shower and locker room has been built for Convair SD flight crews with a 20x30-foot area enclosed on the west side of the floor. In the rearrangement, desks for six men were left just north of the new locker room. One of production flight's classrooms has been taken over as headquarters for 10 other flight crew members.







CLOSEUP—Top photo: this remarkable shot of missile engines running is actually three shots in one. Stands actually were not all three running at same time, but photographer made it appear so by using time exposure. He closed shutter when one stand shut down, opened it when another fired up. Lower photo: business end of Atlas engine. Primary units are two boosters at right and left. Center is sustainer.

System of TV Close-ups Checks Parts for Size

Convair San Diego is using the principle of a TV "close-up" as part of a new inspection method for tools, parts and assemblies that is expected to cut in half the time formerly required for many measurements.

The new system permits measurements to be taken in two planes without moving the part being inspected. Previously, inspection had been limited to a single axis checking procedure, typical of which is a height gauge on a surface plate.

The new universal inspection machine is the only known one of its kind, and was designed and built at Convair SD, according to quality control engineer A. G. "Al" Blakey, who was project engineer.

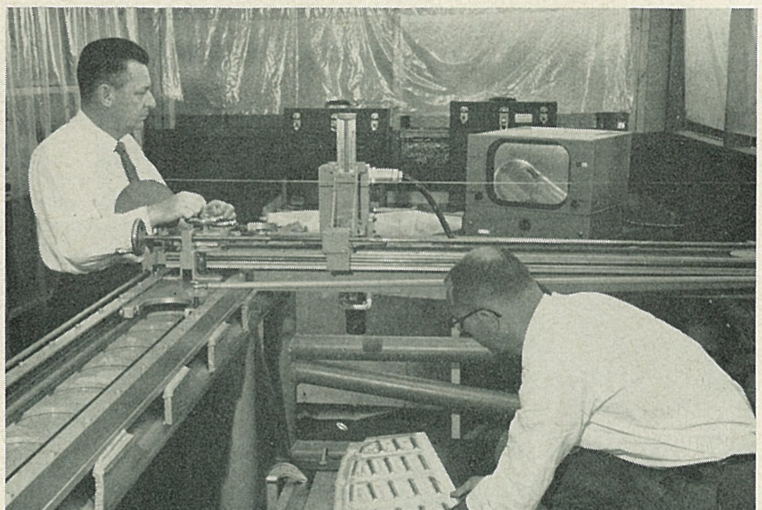
Actually, the basic structure is a converted lofting table, equipped with close tolerance checking scales. The part to be examined is placed on the bed. A lens capable of magnifying parts approximately 15 times is positioned over the part and the operator looks at a closed-circuit TV monitor which enables him to see exactly where to start (and end) his measurement.

The lens apparatus moves on tracks in both X and Y planes, thus permitting the reading of two axes without moving the part.

Blakey said that the principle of the unit can be expanded into automatic inspection methods to cope with increased production.

At present, the manually-operated unit is enabling inspection departments to cope better with machined parts, particularly first-part checks from numerically controlled machines. In addition to measuring full parts (up to eight feet by four feet), it can also measure dimensions of embossed areas.

Development of the universal inspection machine is the result of combined efforts of manufacturing development, tooling and quality control departments.



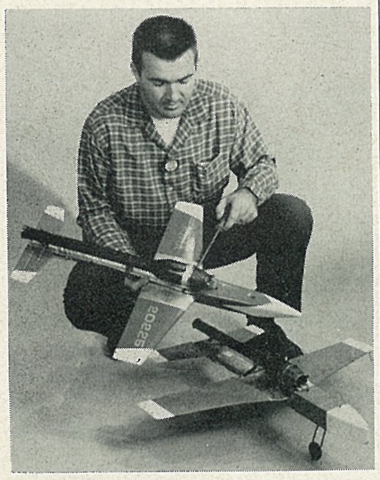
BIG PICTURE—A. G. Blakey (left), SD quality control engineer, and Lloyd Brenn (SD Dept. 288) demonstrate principle of new universal inspection machine recently completed at Convair SD's Plant 2. TV monitor arrangement permits operator to measure parts in two planes.

Fueling a Problem

Model Jet Endurance Record Tough on Both Pilot, Plane

Ben Davis plans to set a world jet endurance record—without leaving the ground.

He hopes to keep his model



JET-BUILDER—Ben Davis, FW structures engineer, readies model jet planes for endurance flight. Davis designed and built planes himself.

jet airplane aloft for ten hours.

"I understand there's no existing endurance record for model jets," the Convair Fort Worth structures engineer explains. "And I'm sure no one has kept one in the air anywhere near ten hours."

To set his record, Davis admits he'll have to evince plenty of Yankee ingenuity.

For instance, there's the problem of "flight sickness." Since the "pilot" will guide the plane by cable, he'll have to revolve each time the plane does.

The plane, jetting around in a 140-foot diameter at 100 miles an hour, will complete a cycle about every three seconds. And so will the pilot. Only by keeping his eyes glued to the flying plane can the pilot avoid dizziness. Davis is looking for three experienced model jet pilots to spell him during the attempt.

Davis' really big problem is going to be refueling the plane in flight.

His model jet holds only 8½ ounces of white gasoline. The engine sucks up more fuel through a tube running from pilot to plane. In a ten-hour, dawn-to-dusk flight, Davis' hungry jet would consume a whopping 20 gallons of fuel.

Davis plans to tie a one-gallon container to his waist. His ground crew will supply him with a full container every half hour.

Another difficulty Davis anticipates is pilot fatigue. The flying jets exert a constant 50 to 60 pounds of pull, enough to wear down even such a stalwart as 6-foot, 3-inch, 210-pound Davis.

Frank Pace Slated For TV Appearance

Frank Pace Jr., chairman of the board of directors of General Dynamics Corporation, will be seen on television in the San Diego area on Sunday (Dec. 27).

He will be one of the featured speakers on "The Christophers" TV show on Channel 10 at 4 p.m. Topic of this Sunday's show will be "Make Science a Force for Good," with Pace pointing out the vital role each individual can play to achieve this goal.



NO AUTOGRAPHS? — When 3504th USAF Recruiting Group sought a novel token of appreciation for recruiting assistance rendered by Convair's Jesse James Walden, San Antonio representative, they added to gags which have been Walden's fate, because of his name. They presented him with framed photograph (discovered in El Paso sheriff's office) of Dodge City "peace commissioners" of '80s.

Alcohol Accidents Climb in December

Alcohol is a factor in 30 per cent of traffic accidents during the first 11 months of the year, T. R. Smith, safety supervisor at Convair Pomona, reported this week.

"In December the figure jumps to 55 per cent," he said in cautioning against driving after holiday drinks.

"Use public transportation, or have a non-drinking friend at the wheel," he advised.

Extra Caution Suggested For Holiday Driving

"Holidaze" can make a tragedy of holidays.

Many, their minds pre-occupied with holiday preparations and festivities, fail to see and notice approaching danger on the roads.

F. R. Temple, chief safety engineer at Convair Fort Worth, has some "expert seeing" tips for drivers:

1. Aim high in steering. A quick glance down the road ahead can save getting into a tight spot.
2. Get the big picture. Shifting your eyes to left and right and up and down is not only safe, it's resting.
3. Check the rear view mirror frequently. It's not only the drivers ahead of you who may be hazards on the road.
4. Leave yourself an out. Keeping a safe margin at all times can save your life.
5. Be sure others see you. You may be aware of the other driver, but unless he's aware of you, he may kill you before he knows what's happening.

Seeing is important for pedestrians, too. When crossing streets be sure to look both ways. Walk facing oncoming traffic and at night wear something white.

Navy Cook Job Proved Downfall For Jockey Who Beat Seabiscuit

At the start of World War II, Convair Pomona's G. H. "Jerry" Grant was a top jockey, booting home mounts at leading race tracks around the country.

Today he's still plying the same trade, but with a difference. He's "jockeying" fork lift trucks for Pomona's material department.

"When I joined the Navy in 1942, they made me a cook," Grant said. "That was my downfall. When I left the Navy in 1946 I weighed 156 lbs. Although I tried to reduce, I could never quite make it down to riding weight again."

Grant, who today weighs 165, got his start in racing as a handler when he was only 13, at the Los Angeles County Fairgrounds in Pomona. He made his debut as an apprentice jockey when he was 15, at Longacres track in Seattle. He raced two summers at Vancouver, B. C., under contract to a Canadian sportsman, and it was there, he said, that he piled up the experience that eventually got him into the big time.

By 1935, Grant was an established jock, riding at Tanforan, Bay Meadows, Tropical Park, Saratoga, and other popular tracks. He rode, incidentally, under the name of "J. W. Grant."

"I rode a horse by that name several times, and since my nickname is Jerry, the fellows around the track started calling me J. W.," he recalled. "The name stuck."

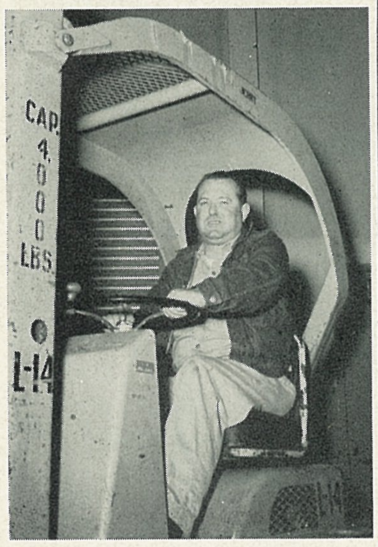
Grant believes his greatest race was at Santa Anita in 1939, when he rode Heelfly to victory over such greats as Seabiscuit, Kayak II and Hysterical in the feature race.

During the late 1930s and early 40s Grant rode for many of the country's leading stables, and for numerous movie stars, including Bing Crosby, Pat O'Brien, Don Ameche, Lum and Abner, Betty Grable and also for former heavyweight boxing champion Jack Dempsey.

Grant still follows racing through the newspapers, but visits the tracks only occasionally.

Heelfly was the greatest horse he ever rode, Grant believes.

"He had a lot of trouble with his legs, but when they were in good shape he could beat the best," he said.



RIDER—Convair Pomona's G. H. "Jerry" Grant (Dept. 4), former big time jockey, is still "riding," but mounts are different. Here he's shown at "reins" of Hyster.

Four From Convair On AIS Committee

Four Convair men will serve on the executive committee of the Aeronautical Industries Section's industrial department during the 1960 term.

J. W. Garrison, Astronautics chief safety engineer, is news letter editor for the Western area and M. V. Clark of Convair SD safety engineering is membership chairman for the West. H. S. Naish, chief of Convair Pomona employee services and safety, will serve as off-the-job safety chairman in the Western area and F. R. Temple, Convair Fort Worth chief safety engineer, will be long-range planning chairman in the Central area.

Garrison was program chairman for the West during the last year and Clark, education and training chairman for the same area.

Convair Men 'Scramble' When CAP Gives Alarm

When the Panther City Squadron, Civil Air Patrol, is ordered to "scramble," chances are Convair Fort Worth men will be deeply involved.

The squadron, which flies from Russell Field, near Fort Worth, is skippered by C. R. Schaeffer, Convair FW safety engineer, and some dozen Convair men are members.

Missions vary widely, but usually are concerned with search and rescue.

"We never know what kind of call we may get," Schaeffer explained. "It can be lost military or civilian flyers, or missing hunters, or persons who may have met with foul play."

One such was an Air Force enlisted man who took off in a rented plane, leaving a note that he intended to commit suicide because his girl had jilted him. A general alarm went out over Mississippi, Texas and Oklahoma. In East Texas Schaeffer, flying in the squadron's two-seat Aeronca Champion, spotted the missing plane, well camouflaged, near a farm house. The "heart-broken" airman was found in Dallas, very much alive.

During the 1957 Richland Hills flood, squadron members did yeoman work evacuating citizens. For his efforts, squadron member Joe Arnold, Dept. 64, received the CAP "Exceptional Service Award."

CAP is an auxiliary of the U.S. Air Force.

Squadron members furnish their own cars and equip them with short-wave radios. The Air Force furnishes only gas and lubricants.

In addition to these activities, the Panther City Squadron has a very active Cadet Program. Purpose is to give 14 to 21-year-old boys basic-type training in areas such as meteorology and communications.

Members of Panther City Squadron who are now or were formerly employed at Convair Fort Worth: Arnold and Donald A. Cash, Dept. 64; Johnny Bethany, Dept. 6; John Hardman, Frank L. Covington, and Roy R. Samsill, Dept. 25.

Joe T. Shimp, Abe M. Chancellor, and Lee R. Howard, Dept. 27; Wilbur R. Rowland, Dept. 4; Josephine S. Gibson and Schaeffer, Dept. 3; and Frank L. Schnell Jr., Dept. 81.

Astro Man Elected AOA Prexy at SD

T. B. Field, Astronautics design engineer, has been named president of the San Diego Post of the American Ordnance Association.

He succeeds Richard M. Meleney who is in Astronautics long-range planning. The group fosters industrial preparedness for national defense.

CONVAIR SD SON EAGLE SCOUT AT 14

William Lumnitzer, son of Steven Lumnitzer, of Convair SD still photo lab, has received the highest Scouting award at the young age of 14. A member of Clairemont Troop No. 274, he completed all requirements for his Eagle rank in just two years.

B-36 Engine Turned Into Snow Sweeper

A jet engine from an old B-36 has come down from the air to sweep tracks for the New York Central Railroad.

The railroad recently bought the surplus jet and mounted it on a self-powered caboose, making a "blasting" snowplow. Tracks and switches can be freed of snow and ice 100 feet in front of the jet exhaust.

A mobile nozzle allows the jet to clean underneath tracks, even when cars are parked on tracks.

FAA AND AIRLINE MEN CONFER AT SAN DIEGO ON 880 PROCEDURES

Convair San Diego was host this month to a group of Federal Aviation Agency and commercial airline representatives here for a Convair 880 Maintenance Program Review Board from Dec. 8 through Dec. 10.

Approximately 40 Trans World Airlines, Delta Airlines, Capital Airlines and FAA men were present to establish inspection and maintenance requirements for the 880 jet transport. Observers from Swissair, Northeast Airlines, and Flying Tigers were also present.

Convair service engineers from customer service department and design engineering personnel acted in an advisory capacity with W. H. Lindsay, service engineering supervisor, as Convair coordinator. T. W. Sanford Jr. was FAA coordinator.

The group was welcomed to the meeting by B. F. Coggan, Convair vice president and SD manager.



CONTACT—C. R. Schaeffer, Convair FW safety engineer, commander of Panther City Squadron, CAP, gets "okay" from pilot Donald A. Cash, formerly Dept. 64, preparatory to search mission in squadron's L-16 Aeronca Champion.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

* * *

Canadair Demonstrates 'Forty-Four' in Flight

MONTREAL — The Canadair "Forty-Four" last month was demonstrated in flight for the first time to a group of high-ranking service officers and government officials which included Air Marshal Hugh Campbell, C.B.E., C.D., Chief of Air Staff of the Royal Canadian Air Force.

At the controls of the Forty-Four were W. S. (Bill) Longhurst, chief pilot of engineering flight test, and co-pilot G. T. (Scotty) McLean. Favorable comment was made on the evident ease of handling of the airplane and on the quietness of its four Rolls-Royce Tyne turboprop engines.

A preliminary test flight took place Nov. 15 as a result of successful taxi trials and the Forty-Four was airborne for 2 hours 10 minutes. The airplane has now entered a comprehensive flight test program which leads to Canadian (Department of Transport) and American (Federal Aviation Agency) type-certification.

The airplane demonstrated was the first of 12 side-loading long-range transport aircraft for the Royal Canadian Air Force. Also on the production line are the first swing-tail commercial freighter airplanes which are being sold to cargo-operators and airlines the world over. Already, the Forty-Four has been purchased by three operators in the U.S.A.

The Canadair Forty-Four at present has a maximum take-off weight of 205,000 lbs. and carries a payload of over 65,000 lbs. more than 3,000 miles with full fuel reserves. Alternatively, up to 189 passengers can be accommodated. Later versions with payloads up to 100,000 lbs. are already being planned. The wing span is 142 ft. 3 in. and the fuselage length is 136 ft. 8 in. Total cargo volume is 7,250 cu. ft. and the cabin length is 98 ft. 7 in.

Four 5,730 e.h.p. Rolls-Royce Tyne turboprop engines drive 16-ft. diameter de Havilland propellers to power the Forty-Four at speeds up to 400 m.p.h.

It is expected that, by the time the Forty-Four goes into airline operation early in 1961, the nominal overhaul period for the Tyne engine will be 1,000 hours. By 1962, the engines will have been developed to a rating of 6,500 e.h.p. Canadair is tailoring the airplane to take this increased power.



THIS WAS XP2Y-1—An improved version of Navy XPY-1 (Convairiety, July 22, 1959) was XP2Y-1 which found favor with U. S. Navy and brought production contract to Consolidated Aircraft in 1932.

Salaries, Wages Cut in Early 30s As Consolidated's Sales Lagged

(With this installment, Convairiety's continuing history of Convair returns to Consolidated Aircraft after reviewing accomplishments of Thomas Brothers and Thomas-Morse prior to their acquisition by Consolidated. Howard O. Welty, who researched this history, calls this 1930-1935 period: "Austerity With Honors.")

Consolidated's history through the early 30s paralleled that of most aircraft manufacturing firms in the depression years. There were exciting new developments in the art and science of aeronautics, but not much to mail the stockholders.

The collapse of sales did not come at once. At the end of 1930, Reuben Fleet, Consolidated's president and founder, informed stockholders the company had delivered more airplanes in number (309) and in total value ($4,345,-170) than any other individual aircraft manufacturing unit in America. But he noted that the net profit equaled only 3 per cent of the entire volume of sales, and observed this was entirely too low for so hazardous a business.

Consolidated sold 133 planes the next year and reported an operating loss of $177,449. The low point was reached in 1932, with sales fewer than 100 aircraft and a loss of $318,947. Salaries and wages were cut 20 per cent. Navy flying boat business and a series of foreign orders for the Fleet trainer quickened the production tempo in 1933-34. Governments ordering trainers included Rumania (20), Portugal (5) and the Republic of China (30).

While the plant was finishing production of the Commodores, I. M. Laddon, Consolidated chief engineer, turned to designing an improved version of the Navy XPY-1. The 100-foot span was retained but a "sesqui" (less than half size) bottom wing was substituted for the horizontal struts that joined hull and floats in the earlier models. Riveted alloy fuel tanks were built into the wings for a saving in weight, and there were other improvements.

The Navy liked the design, Fleet leased additional floor space, and the prototype was ready to fly in March, 1932. A contract for 23 production models followed.

The long, cold winters were a severe handicap for a flying boat firm operating at Buffalo, N. Y. The XP2Y-1 was erected outdoors on a concrete apron adjoining the ramp of the new Buffalo Marine Airport, but even in late March it was a nip-and-tuck affair to beat the weather. A takeoff was decided upon March 26, when the wind blew drifting ice to the far side of the harbor. But a hurried landing was required 32 minutes later when the wind shifted.

A fortnight later the weather still was uncooperative. On April 14 Pilot William Wheatley, Laddon and a Navy inspector took the boat aloft with the intention of delivering it to Washington. After six hours of hither-and-yon flying in a search for a lane through the low overcast, the plane returned to Buffalo; the instrumentation and flying aids of the period made it unwise to bore up through thick weather and fly to a hidden destination.

The plane landed, but ice blown inshore blocked the ramp. Lawrence Bell, a Consolidated vice president, called Buffalo firemen, but they were unable to open a lane. The boat lay offshore at anchor until 10:30 p.m. when a passageway opened up.

("Luckily," Laddon recalled in later years, "I had a small bottle of something along and we all came ashore warm.")



IN FLIGHT—This is Canadair "Forty-Four" turboprop transport. A new "wrap-around" windshield has been designed for it with improved visibility.

TRAINING PANELS GIVEN TO JAYCEE

Obsolete Convair SD aircraft training panels are now being put to good use in San Diego Junior College classrooms.

H. W. Rubottom, chief of SD educational services, said that 22 of the panels which diagram systems of the F-102 have been donated by Convair to the school's aircraft department.

Since the panels were outmoded as far as use at Convair was concerned, and in storage, the company decided to pass them on to the school for training purposes. The portable and compact panels diagram actual aircraft systems of the F-102.

Eisenhower Triggers TRIGA Reactor at Exhibit in India

NEW DELHI, India—President Eisenhower pressed a button to put in operation a TRIGA atomic reactor in the climax to the formal opening of the United States Exhibit at the World Agriculture Fair here this month.

Accompanied by President Rajendra Prasad of India, the President termed the reactor start-up a "really beautiful sight" as he witnessed the reactor's blue glow on attaining its steady-state operating level of 100 kilowatts.

The TRIGA reactor, developed by General Atomic Division for applications in agriculture, medicine, training, research and isotope production, was chosen by the United States Government to be an operating feature of the New Delhi exhibit. Indian and American scientists are using it in experiments and research with isotopes benefiting agriculture.

After watching the reactor for some moments, Eisenhower shook hands with Dr. Frederic de Hoffmann, president of General Atomic. Eisenhower complimented de Hoffmann on the TRIGA exhibit and was told that TRIGAs are in use or soon will be in operation on five of the six continents of the world.

When he left, the President carried away with him a certificate signed by de Hoffmann attesting his "experience" as a reactor operator.

Eisenhower laughingly said, "I am getting to be quite an atomic operator. Now I have turned on three of these." He referred to the United States reactor exhibit at Geneva in 1955 and a research reactor at the University of Pennsylvania.

'Little Joe' Leaves FW For Edwards AFB

"Little Joe," B-58 Hustler No. 22, has left Convair Fort Worth for Edwards Air Force Base, Calif., where it will perform high gross weight landings and performance tests.

"Little Joe" leaves a record of many accomplishments during Fort Worth tests, including the first low-level, cross-country flight to Edwards.

It will remain in California about three months.

New VPs Named To Two Posts At S-C Division

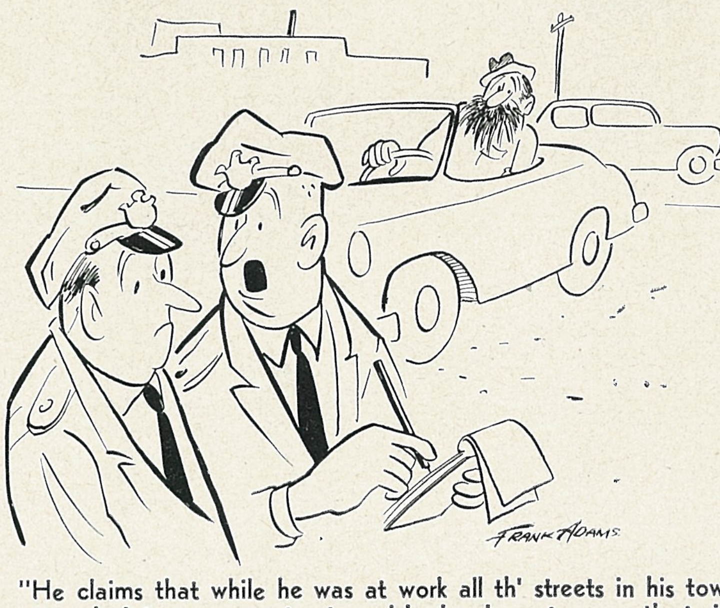
ROCHESTER — Two new vice presidents have been appointed at Stromberg-Carlson Division.

Arthur J. Hatch has been named vice president and general manager of special products division. Kenneth M. Lord has been appointed vice president and general manager of electronics division.

As general manager of the special products division, Hatch will direct production and marketing of Stromberg-Carlson's line of high fidelity components and stereophonic component ensembles, intercommunication and sound distribution systems, automobile radios and a variety of other products.

He succeeds Anthony G. Schifino who has resigned to join Rochester Radio Supply Co.

Lord has been director of engineering of the electronics division since 1958. Products of the division include a broad variety of electronic equipment and systems for military and commercial customers.



"He claims that while he was at work all th' streets in his town were made into one-way streets and he has been two months tryin' to find a way back home. . ."



RECORD—Jane F. Dunn, SD cashier, last week became the first woman in Convair's history to complete 35 years service. Present for official recognition of the occasion were, from left: Dorothy Graham, Anne Filip, H. E. Pasek, D. C. Burrows, SD controller (who presented appropriate emblem and gift of her choice), Jane, J. D. Milling, Catherine Chase, Carol Ulrey, R. C. Welch, Jane Dulong, A. W. Morgan, Kay McCutchan.

New Spanish Class Starts in January

Prospective students at Convair SD interested in attending one of the new Spanish classes to be sponsored by the CRA still have two weeks to register.

Classes for beginners, intermediate and advanced students have been scheduled and will start the first week in January. Registrations are being accepted at ext. 1245, Plant 1. They can also be made by attending the first class.

Instruction for beginners and advanced students will be held Monday evenings, starting Jan. 4. Beginners will meet in Room 6 of the Balboa Park Conference Bldg. and the advanced class in Room 2.

Intermediate instruction will be held Thursday evenings starting Jan. 7 in Room 4 of the Conference Bldg. Each class meets between 7 and 9:30 p.m.

Main purpose of the free course is to give students a "working" knowledge of Spanish.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Dec. 16 through Dec. 31:

Twenty-five-year: Dept. 6-51, J. L. Wainwright.

Twenty-year: Dept. 6, W. L. Dittmann, Eugene Fitzsimons, C. B. King Jr.; Dept. 15, C. W. Ash; Dept. 135, R. C. Dale; Dept. 280, G. L. Scheibel Jr.; Dept. 400, A. M. Walden; Dept. 403, C. N. Thompson.

Fifteen-year: Dept. 1-34, Mildred B. Parsons; Dept. 31, R. E. Hawkesworth Jr., A. A. Martin; Dept. 115, G. D. Carroll; Dept. 116, Laura L. Wood; Dept. 136, Oscar Carlson; Dept. 148, H. A. Gracia; Dept. 197, M. C. Jorgensen; Dept. 217, Cayetano Andrade; Dept. 233, W. J. Cox; Dept. 292, M. B. Thomas; Dept. 401, E. D. Beeson.

Ten-year: Dept. 1-22, Hope A. Newcomer; Dept. 1-63, F. F. DeFrance; Dept. 6, Helen E. Stout, Joyce L. Thompson; Dept 7, R. R. Vincent; Dept. 8, E. J. O'Connell; Dept. 93, C. E. Ulrey; Dept. 101, Thomas Grant Jr.; Dept. 102, E. E. Carmona; Dept. 110, R. M. Laird; Dept. 120, Eythel W. Newman.

Dept. 137, E. L. Noah; Dept. 146, J. E. Bumpass; Dept. 148, D. P. Reyes; Dept. 188, Winifred F. Musselman; Dept. 201, O. M. Larman; Dept. 216, Mary D. Chiechi; Dept. 231, Venancia B. Lanz; Dept. 233, Jean D. Greco; Dept. 267, K. E. Bowers; Dept. 271, O. D. Cruz; Dept. 279, E. E. Reid; Dept. 280, D. M. Hoffman; Dept. 288, Helen A. Jurgensen; Dept. 600, A. L. Snyder; Dept. 603, Mary L. Rigdon.

Promotions

SAN DIEGO

Promotions to or within supervision effective Dec. 7:

Dept. 7-20, Electronics: To engineering adm. supervisor, R. E. Kenyon.

Dept. 44-1, Material Control: To material control asst. supervisor, D. E. Ebert.

Dept. 115, Machine Shop: To asst. foreman, W. H. Hand.

Dept. 603-6, Tool Manufacturing: To foreman, C. L. Planchon. To asst. foreman, A. Phelps.

Personals

SAN DIEGO

We wish to extend our heartfelt thanks to our Convair friends for the sympathy and understanding shown us during the recent loss of our wife and mother.

H. T. Christopherson (Dept. 14-9)
Gary Christopherson

Births

SAN DIEGO

BAKER—Son, Steven Keith, 4 lbs., 6 oz., born Nov. 30 to Mr. and Mrs. R. C. Baker, Dept. 7.

BOMMERSBACH — Daughter, Cynthia Ann, 7 lbs., 6 oz., born Dec. 1 to Mr. and Mrs. C. D. Bommersbach, Dept. 142.

MILLERD — Son, David Lawrence, 7 lbs., 2 oz., born Nov. 23 to Mr. and Mrs. L. V. Millerd, Dept. 403.

Two Convair Teams To Enter Hoop Play

Two basketball teams from Antelope Valley Convair facilities will be entered in league play as it swings into action after the holidays, announced Al Striplin, CRA commissioner.

Convair will be represented by one team from Palmdale and one from Astro MSTS, Striplin said. Sixteen teams from Antelope Valley will play in the tournament under supervision of Los Angeles Department of Parks and Recreation.

'Frigid Idjits' Set New Year's Outing

Water skiers at Convair SD will conduct their annual "frigid idjits" outing on New Year's Day, again braving the "sub-arctic" waters of Mission Bay, Tom Mathews, commissioner, reports.

The annual affair starts at 8 a.m. and a 50¢ fee will be charged to cover fuel costs. For additional information contact Commodore Gene Sevigny, ext. 1032, Plant 1, or BR-3-0828.

Mathews reports conversion of the club's outboard boat to an inboard type is progressing rapidly under the direction of Arleigh Riggs (Dept. 3). Water skiing activities have continued during the fall because of the warm weather.

Three Artists Win Xmas Card Contest

Artists from Convair SD, Astro and Palmdale shared honors last week, winning top awards in a Christmas card design contest sponsored by the Convair SD and Astro Art Clubs.

First place award went to E. B. Hernandez (Dept. 324, Palmdale). An entry submitted by Ruth H. Fair (wife of Jim Fair, Dept. 250-3, Astro) placed second and Tom Potts (Dept. 400, SD) won third place.

All designs entered in the contest were original and hand-painted.

Astro, SD Drivers Share Car Honors

Sports car drivers from Convair SD and Astronautics shared honors Dec. 12 at a CRA-sponsored Hare and Hounds event.

Ranked first were Bill Rector and George Kendall of Astro. In second, third and fourth were Convair SD drivers Bob Dunn, Tom Kienholz and Gim Hom.

Tom Jackson, SD Sports Car Club spokesman, said many entries failed to finish because of thick fog.

12-Year-Old Boy Rolls 501 Series

An Astronautics youngster, 12-year-old Steve Lyons, has been setting an unusual pace in the Astro junior bowling league which meets on Saturdays.

Young Lyons recently posted a 501 series. He also holds the high boys' game average (197) and is a member of the Titans, one of the top teams in the loop.

Hoedowners Install New Officer Slate

Square dancers from Convair SD were hosted at a special installation-of-officers dinner and party Dec. 6 at the Gillespie Field CRA Clubhouse.

Taking office at the dinner meeting were Chuck Svendsen, president; George Greenleaf, vice president; Corky Cowley, secretary; and Dorothy Daughn and Lloyd Burris, publicity.

Maury Scholz, Hoedowner co-commissioner, announced that a special "Old Timers" dance is planned for the Jan. 23 party night at the University Heights Community Center, 4044 Idaho St.

Past Hoedowner members who are no longer active will be admitted upon presentation of either old membership cards or badges. Scholz said many of the older steps and patterns will be called at the dance.

Membership Drive On for Golf Club At Both SD, Astro

Annual membership drive of the Convair Golf Club is now in full swing at both San Diego and Astronautics.

Mort Smith, club secretary, urged all past members to renew their memberships as soon as possible and at the same time issued an invitation to new members.

Ten tourneys and a championship event have been slated for the 1960 season at various courses in the San Diego area. A $3.50 membership fee covers costs of trophies and other tourney prizes in addition to door prizes at each of the quarterly meetings.

Players are asked to contact one of the following team captains in their area for '60 membership cards and additional information:

SD Plant 1, Jake Moore (Dept. 8), ext. 639, Bldg. 33; SD Plant 2, R. A. Lea (Dept. 603), ext. 409, Bldg. 2; Astro, Don Reid (Dept. 182), ext. 2695, Bldg. 1.

Astronotes to Rest Following Xmas

The Astronotes, CRA mixed chorus, plan two weeks of rest following a full schedule of personal appearances during the Christmas season, Commissioner C. P. Rolla reports.

No meetings are planned for Dec. 28 or Jan. 4. Next meeting and rehearsal will be Jan. 11 at 7:30 p.m. in the Astro cafeteria. More voices, especially male voices, are needed.

First Social Event Held at Fairchild

FAIRCHILD AFB—Astronautics employees assigned here held their first social event Dec. 11 when they gathered for a Christmas party at the Plantation, Dishman, Wash.

Steak and lobster dinners were served, and dancing followed to music provided by Neva Nixon and George Finney.

Two New CRA Trap Shoot Teams Chosen at Qualification Event

Over 25 Antelope Valley Convair shooters entered the 50-target trap shoot contest of the CRA Gun Club Sunday (Dec. 6) to compete for new team positions.

Donn Walsh, Gun Club commissioner, explained that Sunday's qualification meet was necessary to re-establish high point men in a team regrouping since several of the members have transferred from the Antelope Valley facilities.

Walsh tied with Bill Reid (Dept. 303), Edwards AFB, for first team standing with 46 out of 50 targets. Other spots on the No. 1 team were garnered by Don Thompson of Hughes, C. H. Barnes (Dept. 321-2), and S. G. Cingle of Hughes.

Second team members are Bill Staton and G. R. Lindamood (Dept. 321-2), tied for top spot, Waller of Edwards AFB, Jack Welch (Dept. 321-2) and Frank Anderson.

Alternates are Chuck Willey (Dept. 323-0) and R. Gore (Dept. 303), Edwards AFB.

Ratings were determined by 25 targets at 16 yards and 25 targets from handicap.

Antelope Valley Convair teams will compete with eight other trap shoot clubs registered in a round robin at future shooting events.

Commissioner Walsh reminds members that ammunition is available at the CRA rifle range at $2.35 a box for shells and $2 for reloads.

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Larry Johnson Heads Trap Shoot Section

Larry Johnson (Dept. 321-2) was elected president of the trap shoot section of Antelope Valley CRA Gun Club at the Dec. 6 meet.

Johnson replaces L. H. "Red" Main (Dept. 303), Edwards AFB, who has served as president for over a year.

The election was held during the trap shoot team's qualification event at the CRA rifle range.

Joe Jackson Named New CRA Commissioner

Joe Jackson (Dept. 321-2) is new commissioner of special activities of Convair Recreation Association in Antelope Valley, announced J. T. Schultz, employee services supervisor.

The new post has been created by expansion of women's activities, and will include responsibility for all special CRA events, explained Schultz. Former commissioner of women's activities was Bette Van Proyen, who recently resigned.

Jackson has been at Convair Palmdale facility for the last three years in electronics. Well-known throughout the valley as a talented musician and comedian, he has been active in organizing and directing local entertainments including the vaudeville for the Gay Nineties program. He also will be seen as emcee at the all-Convair New Year's Eve celebration.

Jackson, with his wife, Shirley, and two children, Susan, 9, and Jeff, 7, makes his home in Lancaster.

CRA Council Feted At Annual Banquet

Annual banquet given by Convair SD in honor of the CRA Council was held this month at the Grant Hotel.

B. F. Coggan, Convair vice president and Convair SD manager, was chief speaker. Master of ceremonies was D. C. Wilkens Jr., manager of industrial relations.

A highlight was presentation of the traditional gift to last year's CRA president. Danny Whorton, Council president, presented a movie projector to Tony Berardini, past president and veteran commissioner.

Club Members Dance At Patrick AFB Club

CAPE CANAVERAL — The first Christmas dance for Astronautics Management Club members here was staged Dec. 18 at the Patrick Air Force Base Officers' Club.

Santa Claus arrived early in the evening with gifts for the ladies. A buffet dinner was served at midnight. Serving on the reception committee were Mr. and Mrs. Jack Nichols, Mr. and Mrs. Len Kaminski and Mr. and Mrs. Jack Moline.

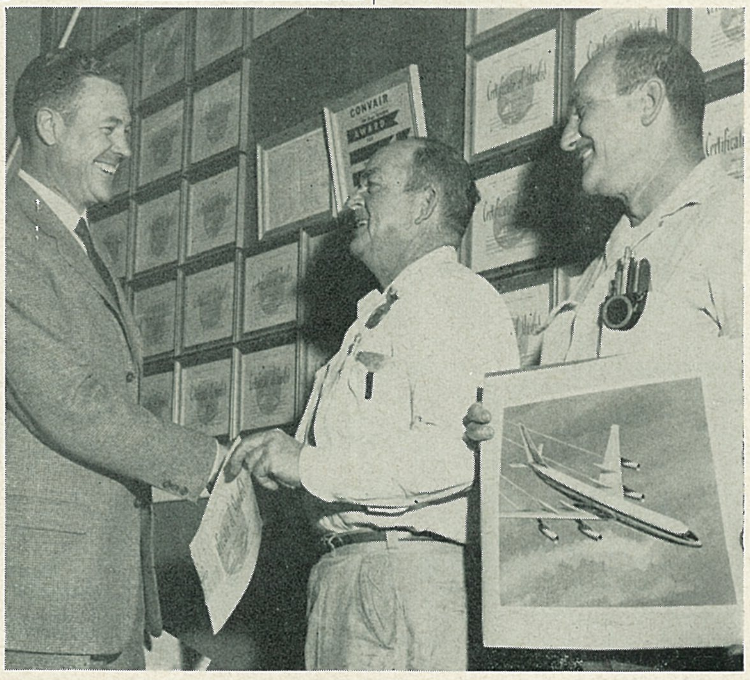
Palmdale Men Get ES Award

Two Palmdale men received payment early this month for their Employee Suggestion which will save Convair SD $855 a year.

L. E. Dechert and O. E. Hutchings, both of Dept. 325, suggested a fabricated disc cutter for cutting out coupling discs. The laminated disc, used between compresser and motor, acts as a drive and shock resistor.

Each of the men received $42.70 each as half-share of the joint award. Hutchings is a refrigeration and air conditioning mechanic, and Dechert, a machinist, in Palmdale maintenance.

Dechert was unable to be present for the check presentation as he is recuperating from an injury received in October when he broke his leg in a fall from the roof of his home.



DOUBLE PAYOFF—F. J. Parker, Palmdale chief of operations and services (at left), presents certificate of award and $42.70 check to O. E. Hutchings (Dept. 325) for his share of joint Employee Suggestion. N. J. Waddington, Dept. 325 assistant foreman, accepts payment for L. E. Dechert (Dept. 325-1).



PRESIDENTIAL GIFT—Tony Berardini (right), president last year of CRA Council, admires movie projector he received in recognition of leadership ability at annual banquet for CRA Council. Danny Whorton, present CRA president, made presentation.

36 Attend Radio Club Swap Night

A swap night staged by the Convair SD Radio Club Dec. 10 at its Harbor Drive headquarters was attended by representatives of five other ham groups in the San Diego area, J. B. Baker, commissioner, reports.

Clubs represented were Ryan, Rohr, Stromberg-Carlson, Imperial Beach and Astronautics. A total of 36 ham enthusiasts were on hand to swap all types of radio equipment including receivers, transceivers, tubes and components.

Baker said the swap night was one of the most successful activities sponsored recently by the club. Winner of the turkey drawing at the meeting was Howard French.

Baker reminded club members that the Dec. 24 meeting of the club has been cancelled. Next meeting will be held Thursday (Jan. 7).

The directory of ham operators, which is being compiled by the club, is expected to be printed soon after the first of the year. When completed, Baker said, it will be distributed to all CRA Radio Club members and all operators listed in the roster. Copies will also be sent to other Convair operating divisions and to Stromberg-Carlson's San Diego plant.

B. Broadway Wins SD Pistol Honors

B. L. Broadway (Dept. 603) swept two events at a Convair SD Pistol Club shoot Dec. 13 and R. G. Lair (Dept. 406) won the club's annual Christmas turkey drawing.

In the regular police course competition (30 shots from 25 yards) Broadway tallied 292 points, later won the short national match event with 282 points.

Rounding out entries in the .22 caliber police course event were Ralph Picard (Dept. 7) who topped the expert class with 270 points and sharpshooter winner, Harvey Ingalls (Dept. 6), with 244 points.

Jeep Clubbers Set Trip for Jan. 10

Members of the CRA Jeep Club will join with the San Diego Country Ridgerunners Jan. 10 for a cross-country jaunt scheduled to leave the Ocotillo gas station on Hwy. 80 at 8:30 a.m.

Art Thomas, club spokesman, said the jeeps will slice cross-country into the vicinity of the Coyote Mountains on a 12-mile trip that will take nearly all day.

Earlier this month the Jeep Club held an outing at which a group of Convair SD-sponsored Air Explorer Scouts were hosted. Rain, snow, sleet and high winds limited distance covered during the two-day trip to about 18 miles.

Three Eagles Pace Golfers in Dept. 3

No less than three eagles highlighted a Dept. 3 golf tournament played this month over the west course at Singing Hills.

Each of the two-under-par scores was made on the 275-yd. par four third hole.

Red McKittrick, fireman, missed a hole-in-one by only 18 inches. Jim Johnston, also a Convair fireman, chipped his second shot in the cup from the apron. Fred Wells, guard, canned an eight-foot putt for his eagle.

Entries Open For CRA Golf

Entries are now being taken at ext. 1705, Plant 1, for the Convair SD CRA sweeps to be played Jan. 16-17 at Circle R. Deadline for registration is Jan. 8.

Ken Wulfemeyer, golf commissioner, reminded SD linksmen that it will be necessary to play in at least three of the monthly tournaments during 1960 in order to be eligible to compete in the plant championship tourney scheduled for Sept. 4, 11, and 18 at Circle R. Six monthly tournaments are slated prior to the championship event, affording ample opportunity to get in the required rounds.

Six golfers in three handicap groups have been announced as winners of Christmas hams as a result of the Dec. 5-6 sweeps at Flying Hills.

In the 0-13 handicap group, Wayne Hines (Dept. 180) shot a 75 to pace low gross entries. Bill Brask (Dept. 6) took first low net honors with a 69.

Bill Clifford (Dept. 400) won low gross in the 14-19 handicap bracket with an 85. Low net winner, with a 68, was George Kobets (Dept. 31). In the third bracket, John Dall (Dept. 6) shot a 97 for low gross honors and Ron Nall (Dept. 3) won low net with a 71.

SD Archers Help Plan New Program For Young Shooters

Convair SD Archery Club will join forces with the Park and Recreation departments of both San Diego and La Mesa to sponsor an archery program for children between 8 and 15.

The program will include competitive team shoots and instruction.

Convair SD parents are invited to enroll their children in the program. Al Phipps, CRA club spokesman, recommended early registration because entries will be accepted on a city-wide basis and a large turnout is expected.

The first shoot has been tentatively scheduled for Jan. 2 at 10 a.m. at Morley Field, Balboa Park. Additional information can be obtained by contacting the San Diego Park and Recreation department, BE-3-8956.

Phipps said a similar program for adults is being considered.

CRA Sports & Recreation Convairiety

Sports Car Club Slates 'Seat of Pants' Jan. 10

Biggest event of the Convair SD Sports Car Club year, the annual "Seat of the Pants" rally, will be held Jan. 10 and for the first time all Convair SD employees can compete free.

First car will leave the Astronautics parking lot at 12:01 p.m. Finish will be at the Wagon Wheel Restaurant in Santee.

Early registration is urged. Entries received by Jan. 3 will receive acknowledgment and starting time by mail. Registration will insure an early starting time, but post entries will be accepted the day of the event.

Last year, the "Seat of the Pants" rally was the second-largest event conducted by any sports car club in San Diego. Entries totaled 191. Only event larger was the Don Diego rally which included many entries from the Los Angeles area.

The rally this year will cover 75 miles of paved road, take about three hours to cover the route. No distance measuring devices will be allowed. Odometers will be covered at the start and the only navigational equipment required is a watch.

Various awards will be made. All entries received by Jan. 3 will be given dash plaques. One trophy will be awarded for every six cars in Convair and guest classes based on the number of entries received by Jan. 3.

Trophies will be given for first, second and third place in both novice (never won a rally award) and beginner (never been on a rally) categories. In addition, there will be awards for all contestants with a "zero" error on any leg of the route.

Entry fee for guests is $1. General instructions will be available at the starting line at 11:30 a.m. For further information, and to obtain entries, contact Bob Dunn, PL-3-3915, or Barrie Freeman, HU-8-6341.

Convair Hoop Teams Meeting Mixed Success

Two Convair SD basketball teams are meeting with mixed success in the San Diego city pre-season tourney now winding up.

Convair SD's Tool Manufacturing entry bowed out in the quarter-finals of the losers' bracket when they were defeated by the Untouchables, 38-25. The defeat set their tourney record at three wins and two losses.

The other Convair entry met with more success, breezing through its first three games. Opponents defeated were the Celtics, 50-43; Evening Tribune, 49-27; and Fire Department, 46-25. A loss to CALEWO, 49-29, pushed them into the semi-finals of the losers' bracket in the double elimination tourney.

Gil Crosthwaite, CRA commissioner, said final tourney standings and scores will be used in deciding which city leagues the Convair teams will enter.

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So far this year the Convair SD girls' basketball team has met with nothing but success.

Last week, the gals swept through their first three games to win the top bracket of the pre-season tourney. The Convair team notched victories over Christ Lutheran, 42-9; Foul Outs, 68-31; and T.O.T.s, 52-14.

A final game for the tournament trophy was scheduled last Friday between the Convair entry and either Federal Civil Service or T.O.T.s.

Regular league play will be held on a Monday and Wednesday schedule at the Hoover High gym starting Jan. 4.

DISCOUNT TICKETS OFFERED BY CRA TO 1960 ATTRACTIONS

Tickets to three coming San Diego attractions will go on sale next Monday (Dec. 28) at reduced prices for Convair SD people.

A 20 per cent discount has been arranged by CRA for the comic opera, "Voyage to the Moon"; appearance of the well-known guitarist, Andres Segovia; and to the showing of "Porgy and Bess."

"Porgy and Bess," first of the scheduled productions, will be shown Jan. 30 at 7 p.m. in the Capri Theater. With the discount, Convair SD folk can purchase tickets at $2 for general admission and $2.40, loge. Regular prices will be $2.50 and $3.

"Voyage to the Moon" will play at 8:30 p.m. Friday (Feb. 21) in Russ Auditorium. Discounts will apply to regular ticket prices of $4.50, $3.85, $3, and $2.75.

Segovia also will appear in Russ Auditorium during the same month, 8:30 p.m. on Tuesday night (Feb. 23). Listed prices of admission are $3.85, $3.50, $3, $2.75, $2.50.

Discount tickets may be purchased at SD employee services, Plants 1 and 2, from next week until date of the performances.

60 Divers Attend Christmas Party

Sixty members of CRA skin diving clubs from Convair SD and Astro attended a Christmas party Dec. 12 at the Balboa Park House of Hospitality, Tom Richardson, SD CRA commissioner, reported.

Richardson said the SD Delta Divers have scheduled their annual "Polar Bear Dive" for the morning of New Year's Day in the La Jolla Cove area. Warmth-providing rubber suits will not be permitted, he added. Members are reminded that the Dec. 22 meeting has been cancelled.



PHOTOGENIC — Membership drive for CRA Camera Club at Convair SD is set to start soon. Joyce Currie (Dept. 61), nominee for club's vice presidency, posed for this publicity photo taken by E. F. White and Ron Ainsworth (both Dept. 6).

Choralaires Busy During Xmas Week With Three Dates

Christmas week is no vacation for members of the Convair SD Choralaires, CRA mixed vocal group.

In fact, it's busier than most. No less than three appearances are scheduled between Dec. 21 and Dec. 27. Yesterday, the Choralaires gave a special Christmas concert in the corridors of Grossmont Hospital; tomorrow (Dec. 23) a similar caroling concert is slated at Mercy Hospital.

On Sunday (Dec. 27), the Choralaires will give another concert of Christmas selections at the Methodist Church in Santee.

Even rehearsals will continue as usual. On Monday (Dec. 28) the vocal group will continue preparations for their Jan. 20 appearance at a meeting of the Convair SD Management Club.

SD Car Clubbers Win Rally Honors

Members of Convair SD's Sports Car Club garnered first place awards last month in two unusual sports car events.

Bob Turner and Bob Dunn (both Dept. 6) placed first and second respectively in the "Rickshaw Venture," an event sponsored by the San Diego Community Chinese Church and the San Diego MG Club. Participants were served four-course Chinese dinners.

Two other Dept. 6 men, Peter Aperlo and Albert Wiest, were the top team in the "Rally Around the Mountain," route which took drivers over dirt roads and rough terrain especially difficult for sports cars to maneuver.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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BADMINTON—Open play for families Tuesday evenings at 7:30 in Balboa Park Federal Bldg.

BRIDGE CLUB—Next session Tuesday (Dec. 29), 7:30 p.m., Hotel Barcelona, 4th and Juniper.

CHORALAIRES — Rehearsals each Monday evening at 7:30 in CRA Clubhouse on Pacific Hwy.

GOLF — Entries now being taken at ext. 1705, Plant 1, for CRA sweeps Jan. 16-17 at Circle R. Deadline is Jan. 8. GOLF CLUB: Annual membership drive now under way.

ICE SKATING — No skating sessions Dec. 24 and 31. Regular Thursday night schedule starts again Jan. 7 at 6:30 p.m. at Iceland, 6055 Lake Murray Blvd.

JEEP CLUB — Cross-country jaunt to Coyote Mountains Jan. 10. Caravan leaves Ocotillo gas station on Hwy. 80 at 8:30 a.m.

JUDO—Workouts every Thursday, 7:30 p.m., CRA Clubhouse on Pacific Hwy.

MOVIES—Reduced-price movies each Tuesday night at Academy Theater, 3721 University Ave. Admission: adults, 25c; children, 15c.

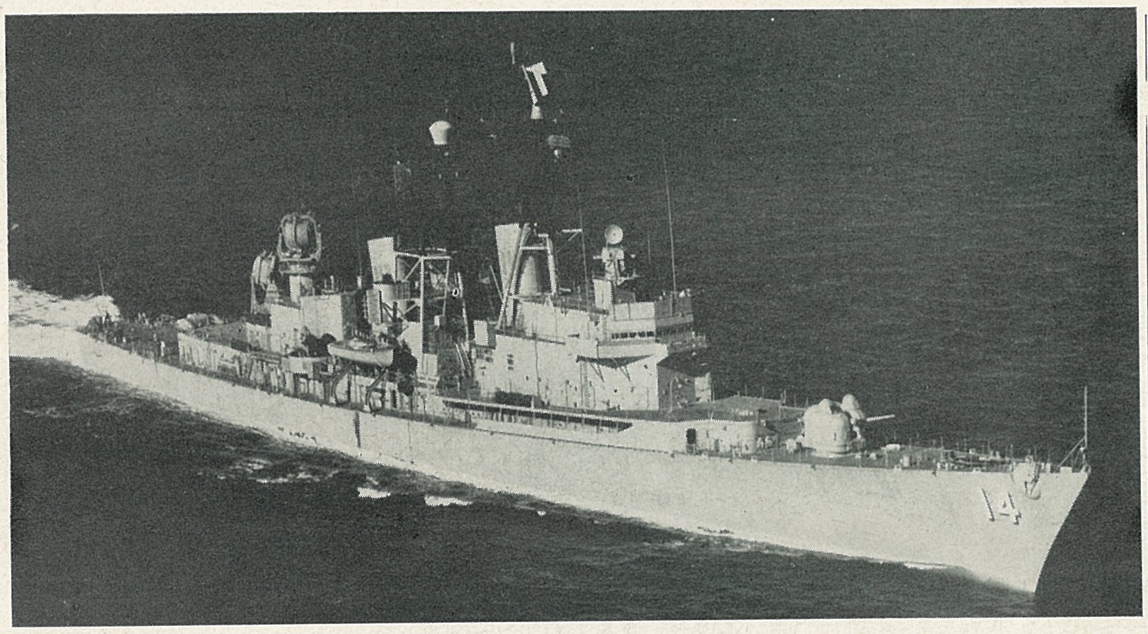
RADIO CLUB—Dec. 24 meeting has been cancelled. Next meeting is Thursday (Jan. 7) at 7:30 p.m. in Harbor Drive headquarters.

SPANISH CLASSES — New schedule for beginners, intermediate and advanced students to start week of Jan. 4.

SPORTS CAR CLUB—Entries now being taken for annual "Seat of the Pants" rally Jan. 10. Contact Bob Dunn, PL-3-3915; or Barrie Freeman, HU-8-6341. Next meeting, Jan. 6, is social affair for members and families at 7:30 p.m., Natural History Museum, Balboa Park.

STAMP CLUB—Next meeting Jan. 7, 7:30 p.m., Balboa Park Conference Bldg.

WATER SKI CLUB — Annual "frigid idjits" outing New Year's Day, starting 8 a.m., Mission Bay.



FIRST FRIGATE—U. S. Navy's first guided missile frigate, USS Dewey (DLG 14), is shown here during sea trials prior to her commissioning Dec. 7 at Boston Naval Shipyard. Note Terrier missile launcher aft.

New Destroyer Leader, Terrier-Armed 'Dewey,' On Active Fleet Duty

Heralding a new era in sea power, USS Dewey (DLG-14), first of a new class of guided-missile destroyer-leaders, officially joined the Fleet at 3 p.m. Monday, Dec. 7, in commissioning exercises at the Boston Naval Shipyard.

The 512-foot, 5,600-ton prototype of the largest destroyer class ever built, is 50 feet longer and almost double the tonnage of the largest World War II destroyer.

Much of her armament and equipment was undreamed of in that conflict. This includes the latest in anti-submarine weapons —the guided missile ASROC (anti-submarine rockets), and Terrier, built at Convair Pomona and designed to repel air attack. More conventional armament includes 50-inch 45 and 3-inch 50 caliber guns and tubes for anti-submarine torpedos.

Implementing this armament are the latest in search radar and long range sonar devices. Once detected, these can keep an enemy target under surveillance, record its height or depth, course and speed. The Dewey will be manned by a complement of approximately 20 officers and 300 enlisted men, including many electronics specialists. The new warship is the second to carry the name of Admiral George Dewey, whose mildly phrased order, "You may fire when ready, Gridley," brought destruction within a span of a few hours to the Spanish fleet in Manila Bay.

She was built at Bath, Maine, by the Bath Iron Works, which also launched the first USS Dewey in 1934.

A comparison of the two illustrates the rapid evolution of warships in the past quarter century.

The new destroyer leader's 5,600 tons are more than three times the 1,726 tons designed displacement of her predecessor and her 512 feet dwarf the other's 341.

The new class even approaches dimensions of cruisers authorized in the World War I era. USS Raleigh, a light cruiser authorized in 1916 and built by Bethlehem Steel Company's Quincy, Mass., yard, was 555 feet long and of 7,050 tons displacement, only 14 feet and 1,450 tons greater than USS Dewey (DLG-14).

Dewey was launched last November, 1958, with New York Congresswoman Katherine St. George as sponsor. Since then the ship has engaged in several sea and machinery trials.

She left the builder's yard early Wednesday morning, Dec. 2, for Boston and arrived that afternoon.

Aboard was her prospective commanding officer, Cdr. Elmo Russell Zumwalt, son of Dr. and Mrs. E. R. Zumwalt of Tulare, Calif., who took command at the commissioning exercise.

He has served in seven ships since graduation from the Naval Academy in 1943, all but one of which were destroyers.

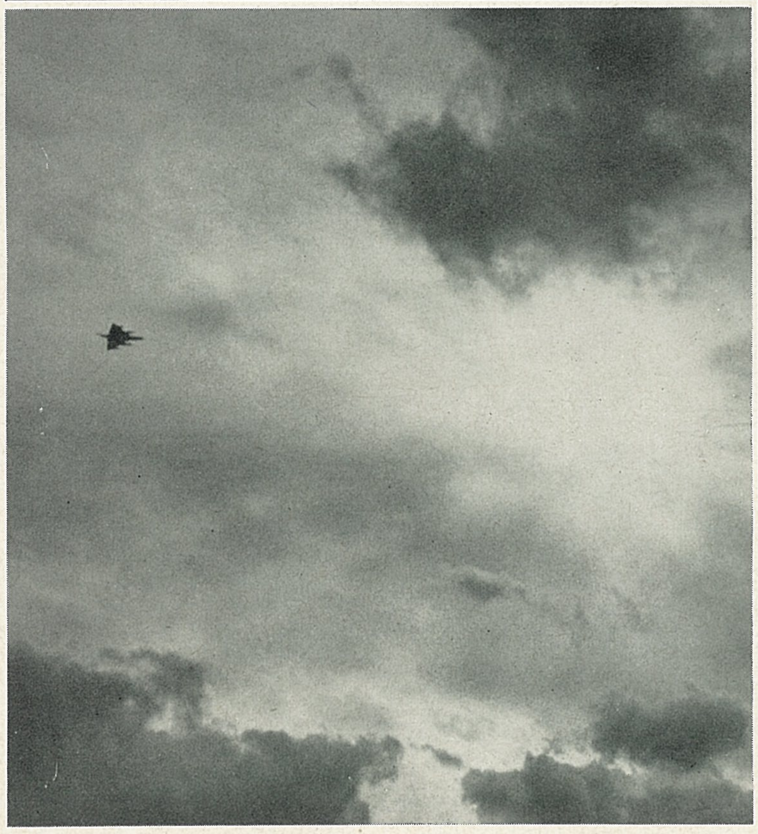


NAMESAKE — Admiral of the Navy George Dewey, only officer of U. S. Navy ever to hold that rank, is shown here. USS Dewey (DLG 14) is second ship to be named for hero of Battle of Manila Bay.

Closed Circuit TV Operates on Dewey

A unique feature aboard the USS Dewey is a closed circuit television installation. TV receivers, located in strategic spots in the ship, show a picture of plotting boards in the combat information center where the TV camera is located. For example, the commanding officer and officer of the deck, by simply glancing over their shoulders at a receiver embedded in the bulkhead on the bridge, can get a full picture of all attacking aircraft being plotted in CIC.

Another feature of the Dewey is the use of aluminum in her superstructure, adding to stability and seaworthiness.



BREAKTHROUGH—"Bright day" for Air Force is indicated as sun breaks through clouds while B-58 Hustler No. 31 heads for new home at Carswell Air Force Base after final acceptance flight. Picture was made on delivery day of first production airplane. Col. David M. Jones, test commander of B-58 Test Force, was at controls of first tactical Hustler during four-and-a-half hour "routine" flight.

Bureau Merger Beats Schedule

The U. S. Navy's Bureau of Ordnance and Bureau of Aeronautics were officially merged Dec. 1 into a new Bureau of Naval Weapons — a full month ahead of schedule.

The new Bureau was actually established on paper Sept. 1, but the additional time was required to complete organizational details. RAdm. Paul D. Stroop, USN, former chief of the Bureau of Ordnance, is the new chief of the Bureau of Naval Weapons.

At Pomona the title of Capt. Edward C. Sledge, USN, has been changed from "Naval Inspector of Ordnance, Pomona," to "Bureau of Naval Weapons Representative." The official abbreviation of the new title is BUWEPSREP.

The official name of the Convair-operated Naval Industrial Reserve Ordnance Plant at Pomona will remain unchanged.

The merger of the two Bureaus was the result of a recommendation of the Department of the Navy's Committee on Organization.

First 880 Spare Parts Orders Speedily Filled Via 'Transceiver' System

First spare parts orders received for the Convair 880 are being shipped to Delta Airlines this month after being processed by Convair SD's new "transceiver" system.

Service parts at Convair SD this month also acknowledged receipt of the first spare parts purchase orders from Trans World Airlines.

Delta, during December, will receive 350 spare parts items for the 880 jetliner. By the end of June, Delta will have received over 5,000 jet 880 spares items valued at roughly $1,300,000, according to Harold Wolfe, SD general supervisor of service parts.

All of the Delta orders are being processed by the new "transceiver" punched card communication system in accordance with Spec 200 as recommended by the Air Transport Association (**Convairiety, Sept. 16, 1959**).

In brief, the system works as follows. Order tab cards received at SD service parts (Midway and Fordham) are pre-punched with all of the information needed for processing. An IBM "transceiver" system reproduces duplicates of the order at Rose Canyon and Bldg. 8, Plant 1. After accounting and shipping functions have completed their tasks all pertinent information connected with processing the part is recorded at service parts by a facsimile posting machine.

The system eliminates many steps formerly required in processing spares orders and is considered one of the most advanced in the industry.

At present, there are some 13,000 "master" tab cards for a corresponding number of jetliner parts on open order. (Eventually, the "jetliner" term will describe parts for both the 880 and 600.) By the end of 1960, the number of jetliner parts on open order will be around 18,000.

The number of jetliner spares being processed by service parts and stocked at Rose Canyon increases daily. At the same time, however, the spare parts program needed to support Convair SD's twin-engine planes is being revamped. It, too, will eventually be processed by the "transceiver" system.

At Rose Canyon, most of the Bldg. 2 warehouse is being used for receiving, stocking and shipping spare parts for the jetliner, twin-engine and military (F-102 and F-106) programs.

R. H. "Buck" Johnson, assistant general foreman of material receiving for the military and commercial spares programs, pointed out that eventually the entire building (100,000 sq. ft.) will be taken up to support the spares program.

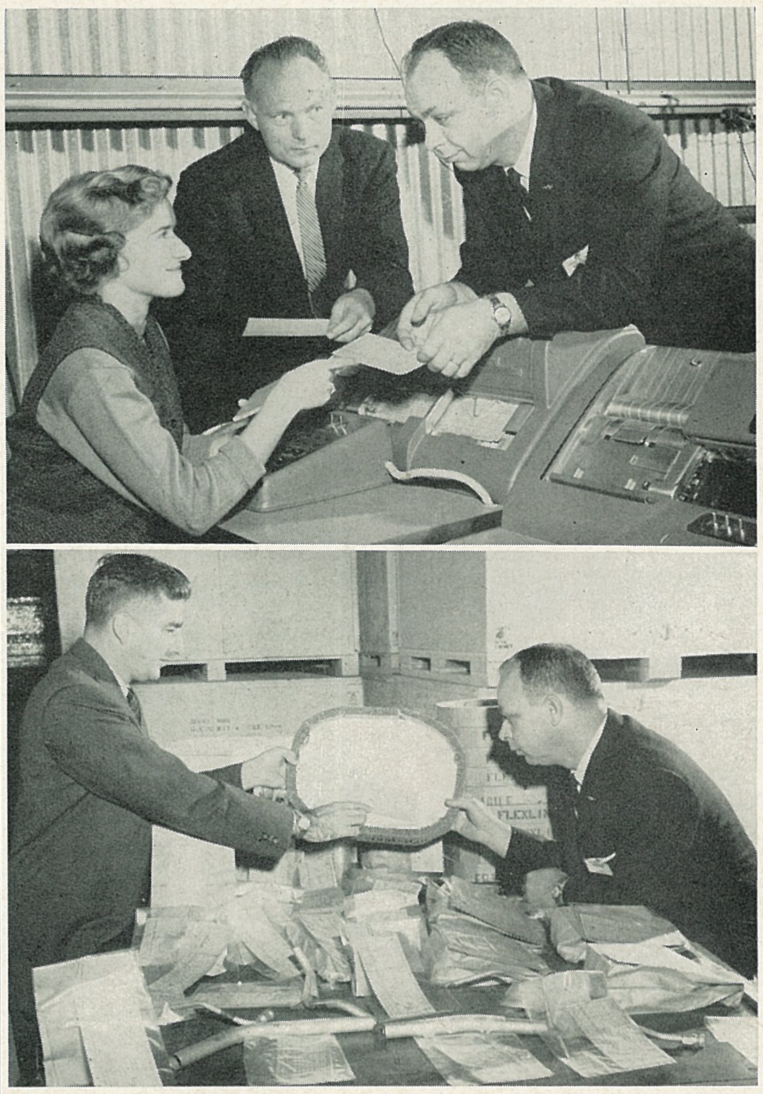
New shelving in the warehouse is constantly being added, most of which will accommodate spares items for the 880 and 600. Johnson estimated that roughly 40,000 spares items will be stocked in the warehouse by the end of 1960 to support both jetliner and twin-engine planes.

The modern processing of spares orders does not end with the "transceiver" system. New packaging methods for shipping parts to airlines are also in use and being developed.

J. J. Janssen, Convair SD packaging specialist, said packages being designed fall roughly into two classes, each of which protects parts to the highest degree possible.

In the "long life" category, containers are designed for repairable parts such as generators, cylinders and control surfaces. Emphasis is placed on quick and easy removal of the part and reusability of the container which is expected to make "100 trips." These containers, for the most part, are made from light weight metals, fiber glass, vulcanized fiber, etc.

Materials used in the "short life" group are made of cardboard, fiberboard and wood. In this category, too, emphasis is placed on having many parts of the container reusable for another shipment.



FIRST ORDER—Delta Airlines this month received first shipment of 880 spares that eventually will total 5,000 items by June. In top photo, Lu Shafer (Dept. 14) discusses punched card "transceiver" system with J. F. Jaehn (center), SD spares store supervisor, and E. L. Elliott, Delta Airlines representative. Below, Harold Wolfe, general supervisor of service parts, shows Elliott ATA Spec 200 packing card which accompanies each item. Note specialized packing of individual parts.